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UNITED STATES DEPARTMENT OF AGRICULTURE
BULLETIN No. 1132

Washington, D. C. PROFESSIONAL PAPER March 21, 1923

THE RESULTS OF PHYSICAL TESTS OF ROAD-BUILDING ROCK FROM 1916 TO 1921, INCLUSIVE

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WASHINGTON
GOVERNMENT PRINTING OFFICE
1923

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Prepared in the Bureau of Public Roads.

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INTRODUCTION.

This bulletin gives the results of tests of all rock made by the Bureau of Public Roads from January 1, 1916, to January 1, 1922, classified alphabetically according to location. It supplements United States Department of Agriculture Bulletin 370, "Results of Physical Tests of Road-Building Rock," and replaces United States Department of Agriculture Bulletin 670, "Results of Tests of Road-Building Rock in 1916 and 1917." The results of tests of approximately 5,300 samples are now avilable in the two bulletins, and these tests represent road-building material from practically all parts of the United States and some parts of Canada, Haiti, the Dominican Republic, and Porto Rico. Reference to Table 1, in which the results of tests made subsequent to January 1, 1916, are tabulated, will show that a test of crushing strength has been made on a number of samples, and a column of test results not found in Bulletin No. 370 is added thereby. Tests of crushing strength made prior to 1916 are recorded in Table 2. This quality of rock is not determined ordinarily when making examinations of their suitability for road building, but it is employed often when considering rock for use as paving blocks or as railroad ballast. A brief description of this test as made by the Bureau of Public Roads is given on page 46.

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TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922.*

ALABAMA.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
13387	Anniston	Calhoun	Limestone	(2)	170	0.22	6.8	5.9	14.7	4
13388	do	do	Magnesium limestone	(2)	174	.64	6.0	6.7	17.3	9
13389	Anniston (near)	do	Limestone	(2)	169	.27	4.8	8.3	14.7	9
13390	Anniston	do	Siliceous dolomite	(2)	175	.30	4.6	8.7	17.3	6
13506	do	do	Sandstone	(2)	154	1.33	6.1	6.5	19.1	10
13507	do	do	Limestone	(2)	169	.16	4.7	8.5	15.3	8
13508	do	do	do	(2)	172	.68	11.6	3.4	(2)	(2)
13509	do	do	do	(2)	140	.12	5.4	7.4	16.0	6
18712	do	do	Blast furnace slag	(2)	179	.57	2.4	16.7	17.0	12
20081	do	do	Slag	(2)	149	1.68	11.5	3.5	13.3	7
13510	Camp McClellan	do	Dolomite	(2)	175	.38	5.0	8.0	16.0	8
13504	Weavers Cave	do	do	(2)	172	.89	7.2	5.5	(2)	(2)
14450	(1)	(1)	Quartzite schist	(2)	164	.38	4.4	9.1	18.7	19
20821	(1)	Colbert	Bituminous limestone	(2)	144	1.19	4.7	8.5	3.3	5
10138	Bridgeport	Jackson	Oolitic limestone	(2)	168	.21	4.4	9.1	15.7	5
20354	Lim Rock	do	Limestone	(2)	168	.16	4.4	9.1	16.3	7
16112	(1)	do	Crystalline limestone	(2)	174	.57	3.8	10.5	15.3	8
16113	(1)	do	Argillaceous limestone	(2)	166	.34	6.2	6.5	18.0	6
9985	Birmingham	Jefferson	Limestone	(2)	168	.55	5.0	8.0	15.3	6
18721	Ensley	do	Slag	(2)	137	4.44	14.7	2.7	(2)	(2)
19981	Opelika (near)	Lee	Mica	(2)	162	2.56	25.3	1.6	(2)	(2)
16186	Athens	Limestone	Chert	(2)	146	4.10	10.7	3.7	(2)	(2)
16188	do	do	Dolomite marble	(2)	168	.60	4.4	9.1	14.7	7
16189	do	do	Crystalline limestone	(2)	167	.79	5.3	7.6	13.3	5
16074	Hartsella (near)	do	do	(2)	165	.81	5.0	8.0	16.3	6
16072	Lacon (near)	do	do	(2)	167	.50	3.4	11.8	15.3	8
16073	do	do	do	(2)	168	.45	3.5	11.4	15.3	9
12757	(1)	Morgan	Limestone	(2)	168	.11	3.8	10.5	14.5	9
12758	(1)	do	do	(2)	166	.38	5.4	7.4	11.9	7
12812	(1)	do	do	(2)	167	.19	6.0	6.7	13.3	6
11506	Gantts Quarry	Talladega	Marble	(2)	169	.29	5.9	6.8	9.7	4

ARIZONA.

14119	Douglas	Cochise	Copper slag	(2)	217	0.58	5.5	7.3	(2)	9
15296	Grand Canyon	Coconino	Calcareous sandstone	(2)	134	8.41	23.3	1.7	0.0	2
15297	do	do	Siliceous limestone	(2)	153	4.20	7.9	5.1	18.7	6
15298	do	do	Chert	(2)	120	4.50	13.7	2.9	(2)	(2)
15299	do	do	Dolomite	(2)	162	2.28	5.0	8.0	15.0	6
13977	Globe	Gila	Copper slag	(2)	221	1.28	3.2	12.5	(2)	(2)
13978	do	do	do	(2)	220	1.43	3.1	12.9	(2)	(2)
14746	do	do	do	(2)	216	1.75	6.8	5.9	15.0	9
15190	Clifton	Greenlee	do	(2)	207	.37	4.5	8.9	18.0	27
11642-A	Tucson (west of)	Pima	Siliceous limestone	(2)	166	.48	5.4	7.4	15.5	5

ARKANSAS.

17696	Cotter	Baxter	Argillaceous dolomite	(2)	163	3.96	6.1	6.6	14.0	5
17475	Heber Springs	Cleburne	Argillaceous sandstone	(2)	(2)	(2)	4.0	10.0	(2)	(2)
16777	Morrillton	Conway	Sandstone	(2)	155	2.10	3.5	11.4	17.7	9
17310	do	do	Feldspathic sandstone	(2)	156	3.18	3.9	10.3	13.7	11
16383	Springfield	do	do	(2)	164	.80	3.4	11.8	(2)	(2)
20891	Beryl	Faulkner	Sandstone	(2)	155	2.01	(2)	(2)	19.3	14
12461	Conway	do	Ferrugineous sandstone	(2)	159	.18	2.6	15.4	17.3	25
19118	do	do	Sandstone	(2)	161	1.62	3.1	12.9	17.3	13
19119	do	do	do	(2)	159	3.91	6.0	6.7	13.3	9
19443	do	do	Feldspathic sandstone	(2)	156	2.50	4.3	9.3	13.7	9
19752	Conway (near)	do	Sandstone	(2)	157	2.57	4.0	10.0	16.7	11
20012	do	do	do	(2)	154	2.89	4.3	9.3	17.3	9
20168	do	do	do	(2)	160	1.36	2.2	18.2	18.0	13
20169	do	do	do	(2)	158	2.09	3.2	12.5	18.0	14
20170	do	do	do	(2)	163	.79	2.2	18.2	19.0	14
20559	Conway (north of)	do	do	(2)	159	1.98	3.2	12.5	17.7	13
19116	Damascus	do	do	(2)	162	1.27	2.7	14.8	18.7	10
18418	Mayflower (near)	do	do	(2)	160	1.35	2.8	14.3	17.3	19
19117	Wooster	do	do	(2)	154	2.45	3.2	12.5	15.3	17
19966	do	do	do	(2)	150	3.19	5.3	7.5	13.3	8
20352	do	do	do	(2)	156	2.12	3.7	10.8	18.3	13
18419	(1)	do	do	(2)	158	1.84	2.9	13.8	17.3	16
19081	(1)	do	do	(2)	162	1.47	3.7	10.8	17.7	15
19082	(1)	do	do	(2)	152	3.16	4.7	8.5	18.3	9
20333	(1)	do	do	(2)	163	1.40	3.7	10.8	15.7	11
15386	(1)	Franklin	do	(2)	158	2.26	5.1	7.8	17.0	11
14425	Penters Bluff	Independence	Crystalline limestone	(2)	166	.60	10.4	3.8	8.3	3
14483	do	do	Chert	(2)	157	2.08	10.8	3.7	(2)	(2)
14885	do	do	Limestone	(2)	166	.67	5.4	7.4	15.3	7
14886	do	do	do	(2)	167	.69	10.5	3.8	7.3	3

[1] Exact locality not known.

[2] Test not made.

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922*—Continued.

ARKANSAS—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
11511	Pfeiffer	Independence	Marble	(2)	163	1.06	(2)	(2)	14.0	5
19056	Cabin Creek	Johnson	Feldspathic sandstone	(2)	157	2.37	3.2	12.5	16.3	13
9828	Lamar	....do	....do	21,980	159	1.97	(2)	(2)	18.7	13
14665	....do	....do	....do	(2)	156	2.51	3.5	11.4	(2)	(2)
14959	....do	....do	....do	(2)	(2)	(2)	(2)	(2)	18.0	14
15443	....do	....do	....do	(2)	155	3.27	5.0	8.0	17.0	11
16510	....do	....do	....do	(2)	156	2.57	3.8	10.5	(2)	13
17258	....do	....do	....do	(2)	155	2.69	3.4	11.8	17.3	11
20819	Black Rock	Lawrence	Dolomite	(2)	156	5.98	5.9	6.8	10.7	7
17902	Sloan	....do	Limestone	(2)	171	1.24	4.9	8.2	13.0	6
19632	Rusellville (near)	Pope	Feldspathic sandstone	(2)	160	1.43	3.2	12.5	19.0	13
12993	Little Rock	Pulaski	Quartzite	(2)	165	.38	3.3	12.1	19.3	26
12994	....do	....do	....do	(2)	165	.27	3.3	12.1	19.0	23
14293	....do	....do	Porphyritic syenite	(2)	163	.20	3.7	10.8	18.5	12
14280	Little Rock (16 miles west of).	....do	Sandstone	(2)	157	1.76	6.4	6.3	16.3	10
12320	(1)	....do	Feldspathic sandstone	(2)	162	.96	2.5	16.0	18.9	32
14279	(1)	....do	Sodalite syenite	(2)	156	1.23	5.0	8.0	18.7	8
9838	Fort Smith	Sebastian	Sandstone	(2)	150	5.00	6.5	6.2	15.3	6
10486	Gillham	Sevier	Feldspathic quartzite	(2)	164	.42	2.3	17.4	19.0	32
13295	White Cliffs	....do	Argillaceous limestone	(2)	(2)	(2)	13.9	2.9	0.0	(2)
16657	Williford	Sharp	Dolomite	(2)	169	2.40	3.6	11.1	(2)	(2)
17908	....do	....do	....do	(2)	177	.89	3.7	10.8	14.7	16
16488	Fayetteville	Washington	Weathered chert	(2)	(2)	(2)	2.2	14.0	(2)	(2)
20923	....do	....do	Argillaceous limestone	(2)	168	1.65	5.4	7.4	15.3	7
15466	Plainview	Yell	Feldspathic sandstone	(2)	152	4.01	4.7	8.5	15.3	6

CALIFORNIA.

11527	San Francisco	San Francisco	Marble	(2)	176	0.35	(2)	(2)	12.0	6
11373	San Jose	Santa Clara	Feldspathic quartzite	(2)	172	.32	1.8	22.2	18.7	18
14496	Kennett	Shasta	Copper slag	(2)	221	1.09	4.9	8.2	17.7	9

[1] Exact locality not known.

[2] Test not made.

COLORADO.

15782	Boulder	Boulder	Sandstone	10,625	151	3.92	8.6	4.7	16.7	7
15783	.....do	.....do	.....do	19,110	150	3.53	6.7	6.0	16.7	7
15784	.....do	.....do	.....do	17,510	148	2.89	5.1	7.8	16.7	8
13892	Boulder (near)	.....do	Feldspar basalt	(2)	174	.56	2.9	13.8	18.8	18
18684	Longmont	.....do	Limestone	(2)	168	.45	4.6	8.7	13.3	6
9822	Lyons	.....do	Sandstone	(2)	156	1.73	3.4	11.8	18.3	11
9821	Lyons (near)	.....do	Argillaceous limestone	(2)	162	2.98	4.9	8.2	15.3	7
9823	.....do	.....do	Sandstone	(2)	156	1.37	2.9	13.8	16.0	14
11169	Denver	Denver	Smelter slag	(2)	216	.65	7.6	5.3	(2)	(2)
11170	.....do	.....do	.....do	(2)	217	.50	5.1	7.8	(2)	(2)
11171	.....do	.....do	.....do	(2)	217	.86	4.6	8.7	17.3	15
14998	Globeville	.....do	Lead slag	(2)	217	.49	7.8	5.1	(2)	(2)
11168	Globeville (near)	Jefferson	Augite andesite	(2)	169	1.27	2.7	14.8	15.3	17
15016	Pueblo	Pueblo	Lead smelter slag	(2)	213	.53	5.5	7.3	(2)	(2)
15017	.....do	.....do	.....do	(2)	223	.44	6.0	6.7	(2)	(2)
15018	.....do	.....do	.....do	(2)	220	.34	5.6	7.1	(2)	(2)

CONNECTICUT.

9944	Plainville	Hartford	Diabase	(2)	184	1.14	2.0	20.0	19.0	23
12114-A	Rockyhill	.....do	Altered diabase	33,220	182	.34	2.7	14.8	17.3	21
14965	(1)	.....do	.....do	(2)	184	.25	3.0	13.3	18.0	20
14970	(1)	.....do	.....do	(2)	185	.24	2.7	14.8	1.73	22
18722	East Canaan	Litchfield	Slag	(2)	139	1.80	11.0	3.6	(2)	(2)
18710	Middlefield	Middlesex	Diabase	(2)	184	.26	2.1	19.0	17.7	20
11151	East Haven	New Haven	Altered basalt	(2)	169	.63	3.7	10.8	17.3	10
19732	.....do	.....do	.....do	(2)	176	.19	(2)	(2)	16.7	10
18226	Milford	.....do	Hornblende schist	(2)	189	.30	4.0	10.0	16.7	11
12115-B	North Branford	.....do	Diabase	(2)	184	.27	4.1	9.8	16.0	12
12018	.....do	.....do	.....do	(2)	185	.91	3.8	10.6	15.3	10
12235	Reeds Gap	.....do	.....do	10,817	182	.49	2.8	14.3	17.3	11
19725	Wood Bridge	.....do	.....do	30,475	184	.39	2.9	13.8	17.7	14
11067	Waterford	New London	Granite	21,840	162	.74	(2)	(2)	18.7	13
11068	.....do	.....do	Biotite granite	23,850	162	.78	(2)	(2)	18.7	8
11069	.....do	.....do	.....do	22,170	164	.71	(2)	(2)	18.7	14
9791	Oneco	Windham	.....do	16,635	(2)	(2)	(2)	(2)	18.3	8
11098	.....do	.....do	.....do	23,290	164	.55	(2)	(2)	18.7	6
11099	.....do	.....do	Gneissoid granite	20,200	163	.67	(2)	(2)	18.7	6
13865	.....do	.....do	Granite	(2)	(2)	(2)	4.5	8.9	18.0	8
11148	(1)	.....do	Gneissoid granite	20,825	163	.44	4.6	8.7	18.7	7

[1] Exact location not known.

[2] Test not made.

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922*—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
DELAWARE.										
13893	Elsmere	Newcastle	Plagioclase gneiss	(2)	168	0.20	3.6	11.1	18.7	9
12839	Faulkland	do	Hypersthene gneiss	(2)	184	.04	4.0	10.0	18.0	14
13838	do	do	Hornblende gneiss	(2)	181	.31	3.7	10.8	18.7	12
14114	Hockessin	do	do	(2)	194	.16	3.1	12.9	17.2	11
14025	Stoney Battery (near)	do	Hornblende schist	(2)	191	.25	3.6	11.1	17.7	8
11722	Wilmington	do	Feldspathic quartzite	21,060	(2)	(2)	(2)	(2)	18.7	10
15367	do	do	Pyroxene quartzite	(2)	175	.69	3.3	12.1	18.7	12
15401	do	do	do	(2)	177	.18	3.3	12.1	18.7	13
13033	Yorklyn	do	Hornblende gneiss	(2)	173	.23	3.2	12.5	18.3	10
DISTRICT OF COLUMBIA.										
19620	Washington, D. C.		Mica gneiss	(2)	173	0.38	4.2	9.5	17.3	8
20320	do		do	(2)	176	.34	6.0	6.6	17.7	7
FLORIDA.										
10192	Titusville	Brevard	Shell limestone	(2)	155	4.03	7.5	5.3	14.9	2
13788	Floral City	Citrus	Weathered chert	(2)	(2)	(2)	17.9	2.2	(2)	(2)
19248	Ojus	Dade	Shell limestone	(2)	(2)	(2)	21.0	1.9	(2)	(2)
19249	do	do	do	(2)	(2)	(2)	16.1	2.5	(2)	(2)
9739	Montbrook	Levy	Chert	(2)	156	2.02	3.2	12.5	(2)	(2)
9740	do	do	do	(2)	156	2.74	3.5	11.4	(2)	(2)
13568	do	do	do	(2)	148	4.22	15.6	2.6	17.3	16
10430	Boynton (near)	Palm Beach	Shell limestone	(2)	(2)	(2)	37.2	1.1	(2)	(2)
10411	Delray (2 miles west of)	do	do	(2)	(2)	(2)	50.9	.8	(2)	(2)
10431	Jupiter (50 miles west of)	do	Siliceous limestone	(2)	(2)	(2)	12.5	3.2	14.7	5
18149	Live Oak	Suwanee	Limestone	(2)	145	4.57	15.6	2.6	9.0	4
13301	Chipley	Washington	do	(2)	156	2.37	12.3	3.3	14.4	5

10398	Cartersville (3 miles east).	Bartow	Quartz schist	(2)	159	0.71	5.0	8.0	19.3	11
10399	do	do	Ferruginous sandstone	(2)	145	8.74	22.0	1.8	(2)	(2)
12933	Cartersville (near)	do	Dolomite	(2)	174	1.02	3.9	10.2	16.0	8
12957	do	do	do	(2)	173	.35	3.9	10.3	18.0	6
10400	Cass Station (2 miles north).	do	Sandstone	(2)	152	2.86	(2)	(2)	18.7	12
13845	Macon	Bibb	Biotite gneiss	(2)	168	1.20	5.9	66.8	18.0	8
10657	Bowdon (1 mile north)	Carroll	Amphibolite	(2)	187	1.20	19.0	2.1	10.5	4
10645	Carrollton (4 miles north).	do	Biotite gneiss	(2)	172	.35	4.7	8.5	17.7	7
10646	Carrollton (near)	do	Granite gneiss	(2)	165	.62	4.5	8.9	18.7	5
10647	Carrollton (2 miles southwest).	do	do	(2)	169	.51	4.6	8.7	18.5	6
10648	Carrollton (near)	do	do	(2)	168	.53	4.8	8.3	18.7	4
10649	Carrollton (4 miles southeast).	do	Biotite schist	(2)	168	.51	5.7	7.0	18.9	8
10654	Carrollton (7 miles northeast).	do	Biotite gneiss	(2)	166	.67	(2)	(2)	18.0	10
10651	Mabry	do	Epidote hornblende schist	(2)	192	1.12	5.5	7.3	17.7	9
10653	Roopville	do	Mica schist	(2)	168	.75	(2)	(2)	16.7	5
10655	Temple (4 miles east)	do	Biotite gneiss	(2)	169	.56	7.7	5.2	17.0	5
11512	Ball Ground	Cherokee	Marble	(2)	169	.29	12.4	3.2	8.0	3
11529	Holly Springs	do	Serpentine marble	21,850	178	.40	(2)	(2)	12.6	6
10417	Athens	Clarke	Biotite granite	(2)	165	.68	6.4	6.3	18.7	6
10418	do	do	Granite gneiss	(2)	169	.76	7.5	5.3	17.7	6
10420	do	do	Biotite granite	(2)	167	.47	5.9	6.8	18.7	4
10421	Athens (south of)	do	Biotite gneiss	(2)	167	.65	(2)	(2)	18.7	6
10422	Athens (4 mils west of)	do	Biotite granite	(2)	163	1.56	(2)	(2)	15.4	4
10423	Athens (4 miles from)	do	do	(2)	163	.58	4.4	9.1	17.8	9
10387	Acworth (½ mile south)	Cobb	Biotite gneiss	(2)	175	.68	8.6	4.7	16.7	9
10388	Acworth (4 miles south of)	do	do	(2)	174	.59	10.1	4.0	16.7	5
10389	Austell (⅜ mile west of)	do	Granite gneiss	12,890	163	.56	7.4	5.4	18.7	5
10393	Blackwells Station (1 mile north).	do	Hornblende gneiss	17,350	184	.42	4.9	8.2	17.3	7
10378	Chattahoochee River (near).	do	Biotite gneiss	(2)	165	.26	5.1	7.8	18.6	8
10381	Kennesaw Mountain	do	Feldspathic gneiss	18,500	167	.73	(2)	(2)	18.7	6
10394	Kennesaw Mountain (north of).	do	Hornblende gneiss	(2)	180	1.05	(2)	(2)	18.0	7
10395	Kennesaw Station (4 miles northwest).	do	Amphibolite	(2)	191	.46	5.3	7.5	15.3	5
10380	Lost Mountain Store (near).	do	Hornblende gneiss	(2)	188	.93	(2)	(2)	13.3	4
10377	Marietta (½ mile south)	do	Biotite gneiss	(2)	170	.67	6.5	6.2	17.3	6
10382	Marietta (4 miles northwest).	do	do	14,000	169	.50	5.6	7.1	17.3	6
10379	Smyrna (3¼ miles west)	do	Magnetic quartzite	(2)	172	.84	(2)	(2)	18.0	7
9869	Lela	Decatur	Siliceous shell limestone	(2)	125	2.51	22.2	1.8	19.3	5

[2] Test not made.

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922*—Continued.

GEORGIA—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
11204	Decatur (near)	Dekalb	Biotite gneiss	(2)	162	.65	3.8	10.5	18.0	12
11205	Decatur	do	Granite	(2)	161	1.07	7.3	5.5	18.0	6
11206	Decatur (near)	do	Biotite gneiss	(2)	168	.73	5.3	7.6	17.3	9
11940	Lithonia	do	Granite	(2)	163	.43	4.6	8.7	17.9	6
11941	do	do	do	21,280	165	.50	3.2	12.5	18.0	12
11942	do	do	do	15,325	163	.51	4.7	8.5	17.8	6
11943	do	do	do	17,830	163	.63	4.0	10.0	18.2	7
13502	do	do	do	(2)	166	.49	6.1	6.6	(2)	8
13533	do	do	do	(2)	164	.54	5.4	7.4	(2)	9
19344	do	do	do	27,250	164	.54	5.6	7.1	17.3	9
19940	do	do	Muscovite granite	17,695	163	.74	6.0	6.7	17.3	5
19941	do	do	Biotite granite	25,000	163	.59	5.6	7.1	18.0	6
19942	do	do	Muscovite granite	24,865	163	.46	5.6	7.1	17.7	7
20001	do	do	Granite	26,630	164	.54	4.4	9.1	18.7	7
20095	do	do	do	20,620	163	.54	5.5	7.3	17.7	7
20121	do	do	do	28,100	162	.78	4.2	9.5	18.3	8
20122	do	do	do	23,080	164	.51	4.7	8.5	18.3	5
20151	do	do	do	24,300	163	.55	4.4	9.1	19.0	6
12078	Stone Mountain	do	do	11,220	164	.63	4.5	8.8	17.3	7
17641	Elberton	Elbert	Biotite granite	28,360	165	.38	3.6	11.1	18.7	12
19521	do	do	do	27,945	165	.03	4.1	9.8	18.7	9
10221	Armuchee (1 mile southeast).	Floyd	Crystalline limestone	(2)	168	.35	5.5	7.3	15.0	6
10222	Armuchee	do	Oolitic limestone	(2)	168	.20	4.2	9.5	16.0	8
10223	Armuchee (near)	do	Limestone	(2)	168	1.12	3.8	10.5	16.7	8
10224	Armuchee (southeast of)	do	Argillaceous limestone	(2)	167	.59	4.0	10.0	17.3	16
10197	Beech Creek Bridge	do	Calcareous shale	(2)	163	2.14	(2)	(2)	10.7	8
10202	Dozier Creek (near)	do	Limestone	(2)	170	.44	5.1	7.8	15.7	4
10198	Huffaker Station	do	do	(2)	170	.22	3.6	11.1	16.0	6
10199	Lavender Mountain	do	Sandstone	(2)	163	1.47	(2)	(2)	17.7	29
10203	Pinson	do	Limestone	(2)	169	.22	4.9	8.2	15.3	5
10200	Rome (3 miles north)	do	Argillaceous limestone	(2)	168	.21	5.1	7.8	15.7	12
10211	Rome	do	do	(2)	167	.95	5.6	7.1	14.7	13
9751	Atlanta (near)	Fulton	Biotite granite	(2)	168	.32	3.7	10.8	18.3	8
9752	do	do	Granite gneiss	(2)	165	.53	(2)	(2)	18.7	9
9753	do	do	Gneissoid granite	(2)	168	.35	3.8	10.5	(2)	(2)
9754	do	do	Biotite gneiss	(2)	165	.94	8.4	4.8	17.3	7
9755	Atlanta	do	Mica gneiss	(2)	165	.38	3.9	13.3	18.7	10
9756	Atlanta (near)	do	Granite gneiss	(2)	165	.30	4.3	9.3	18.7	7

9757	do	do	do	[2]	165	1.01	[2]	[2]	17.2		7
9758	do	do	do	[2]	165	.41	4.1	9.8	19.3		13
9759	Atlanta	do	do	[2]	168	.30	3.8	10.5	18.3		13
9760	Atlanta (near)	do	do	[2]	165	.40	3.5	11.4	18.3		9
9761	do	do	Gneissoid granite	[2]	165	.34	4.7	8.5	18.0		7
9762	do	do	Biotite gneiss	[2]	172	1.03	[2]	[2]	14.7		4
9763	do	do	Hornblende schist	[2]	184	.77	[2]	[2]	19.0		7
9764	Atlanta	do	Gneissoid granite	[2]	162	.85	[2]	[2]	19.3		8
9765	Atlanta (near)	do	Biotite gneiss	[2]	165	.18	5.0	8.0	18.7		6
9766	Atlanta	do	Granite gneiss	[2]	165	.36	3.4	11.8	18.0		9
9767	do	do	Hornblende biotite gneiss	[2]	175	.26	4.4	9.1	16.7		6
13914	do	do	Granite	[2]	[2]	[2]	4.4	9.1	18.0		9
10396	Fairmount (½ mile south)	Gordon	Limestone	[2]	169	.27	5.3	7.5	14.7		5
10397	Fairmount (near)	do	do	[2]	170	.08	4.1	9.8	15.3		6
10559	Grayson (2 miles east)	Gwinnett	Biotite granite	[2]	158	.71	5.7	7.0	18.0		5
10561	Grayson (southwest of)	do	Gneissoid granite	[2]	162	.67	5.2	7.7	17.5		4
10563	Grayson (3 miles southwest of)	do	Granite	[2]	162	.78	5.5	7.3	18.3		6
10562	Langley Quarry	do	do	[2]	162	.82	6.7	6.0	17.5		4
10547	Lawrenceville	do	Biotite hornblende schist	[2]	183	.60	[2]	[2]	15.7		5
10553	do	do	Granite gneiss	[2]	159	.62	4.4	9.0	17.0		5
10554	Lawrenceville (near)	do	Granite	[2]	165	.33	5.9	6.8	19.2		6
10555	Lawrenceville (1½ miles east of)	do	do	[2]	162	.86	[2]	[2]	17.7		4
10556	Lawrenceville (12 miles northeast of)	do	Hornblende schist	[2]	196	.65	6.6	6.1	[2]	[2]	
10557	Lawrenceville (6 miles southeast of)	do	Granite	[2]	162	.72	4.9	8.2	18.4		6
10558	Lawrenceville (near)	do	do	[2]	162	.61	4.6	8.7	18.0		5
10650	Lawrenceville (4 miles west of)	do	Amphibolite	[2]	190	.32	3.4	11.8	18.0		13
10560	MacElveny Shoals	do	Gneissoid granite	[2]	162	.71	5.2	7.7	18.2		4
10564	Roseburg	do	Biotite gneiss	[2]	162	.69	5.6	7.1	18.9		6
10565	Snellville (near)	do	do	[2]	162	.73	5.5	7.3	17.7		3
10566	Snellville (2 miles southeast of)	do	Granite	[2]	162	.73	4.0	10.0	18.3		6
10546	Jefferson (4 miles north)	Jackson	do	[2]	163	.65	5.6	7.1	18.3		5
10656	Jefferson (3 miles east of)	do	Hornblende schist	[2]	190	.04	[2]	[2]	17.0		4
10545	Holders Siding (near)	do	Hornblende gneiss	[2]	165	.48	4.0	10.0	18.3		7
10543	Prendergrast	do	Olivine diabase	[2]	184	.09	3.6	11.1	19.0		16
10544	Talmo	do	Granite gneiss	[2]	161	1.13	7.6	5.2	[2]		5
10897	Robertsville (1½ miles northeast)	Jones	Argillaceous sandstone	[2]	105	19.08	12.2	3.2	[2]	[2]	
16655	Dublin (near)	Laurens	Chert	[2]	150	4.03	8.2	4.9	20.0		7
10384	Marietta-Rockwell road	Milton	Granite gneiss	[2]	167	.56	6.6	6.1	18.0		8
10385	do	do	do	[2]	163	.59	6.9	5.8	18.7		6
10858	Columbus (4 miles north)	Muscogee	Hornblende gneiss	[2]	179	.25	4.5	8.9	16.7		5
10859	Columbus	do	do	[2]	179	.45	5.0	8.0	16.7		5
10864	Columbus (8 miles north of)	do	Granite gneiss	[2]	163	.83	4.3	9.3	18.7		7

[2] Test not made.

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922*—Continued.

GEORGIA—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
10881	Columbus (east of)	Milton	Granite gneiss	(2)	165	.36	3.9	10.2	18.7	7
10860	Fortston (2 miles southeast).	do	Biotite granite	(2)	168	.40	4.2	9.5	19.3	8
10861	Fortston (4 miles south)	do	Biotite gneiss	(2)	167	.48	3.7	10.8	18.7	10
10862	Fortston (1 mile southwest).	do	do	(2)	164	.89	5.3	7.6	18.7	9
10863	Gentian (3½ miles northeast).	do	do	(2)	163	.50	3.6	11.1	18.7	9
10865	do	do	Hornblende gneiss	(2)	163	.58	3.7	10.8	18.7	10
11518	Marblehill	Pickens	Marble	(2)	169	.09	15.7	2.5	11.3	2
11513	Tate	do	do	(2)	169	.17	13.2	3.0	9.3	2
11514	do	do	do	(2)	169	.33	12.0	3.3	10.3	2
11515	do	do	do	(2)	169	.40	17.0	2.4	3.9	3
11516	do	do	do	11,340	171	.37	10.6	3.8	10.3	2
11517	do	do	do	8,735	169	.40	(2)	(2)	8.6	3
17757	do	do	do	(2)	168	.47	12.5	3.2	11.3	3
15378	Talbotton (near)	Talbot	Diabase	(2)	187	.32	1.7	23.5	18.7	27
			IDAHO.							
10462	St. Anthony	Fremont	Basalt	(2)	159	4.17	7.2	5.6	16.7	4
17329	Filer	Twin Falls	Olivine basalt	(2)	175	1.34	4.6	8.7	16.3	12
			ILLINOIS.							
15938	Olive Branch	Alexander	Chert	(2)	148	1.97	9.7	4.1	(2)	(2)
18739	Irondale	Cook	Slag	(2)	126	1.17	19.9	2.0	(2)	(2)
11224	McCook	do	Dolomite	(2)	158	2.33	6.0	6.7	(2)	(2)
11226	Thornton	do	do	(2)	157	2.43	6.8	5.9	(2)	(2) 6
11872	do	do	Argillaceous dolomite	(2)	162	2.27	5.5	7.3	13.6	6
14426	South Chicago	do	Slag	(2)	141	3.48	9.1	4.4	14.3	7
16039	(1)	do	Dolomite	(2)	159	3.12	4.5	8.9	14.0	12
12236	Whitehill Quarry	Johnson	Siliceous limestone	(2)	195	.54	4.9	8.2	14.7	
9750	Aurora	Kane	Smelter slag	(2)	221	.17	2.2	18.2	(2)	(2)

10367	Kankakee	Kankakee	Dolomite	11,180	158	2.12	8.4	4.8	16.0	5
11790	Lehigh	do	Argillaceous dolomite	(2)	157	3.08	7.0	5.7	14.3	7
13297	do	do	Dolomite	(2)	162	2.60	4.6	8.7	12.7	7
10208	Fox Township	Kendall	do	(2)	169	1.67	4.9	8.2	13.3	8
11133	Coniac	Livingston	Argillaceous limestone	(2)	156	2.73	12.9	3.1	(2)	(2)
11780	Alton	Madison	Limestone	(2)	166	.93	5.9	6.8	12.7	4
14949	(1)	do	Fossiliferous limestone	(2)	166	1.19	6.0	6.7	18.3	10
19451	Cobden	Union	Argillaceous limestone	35,320	167	.37	3.5	11.4	16.3	9
20002	do	do	Limestone	22,570	168	.27	4.0	10.0	16.0	10
10772	Aurora (near)	Will	Smelter slag	(2)	212	.00	7.3	5.5	18.7	7
9827	Joliet	do	Dolomite	8,130	168	1.18	4.9	8.2	15.1	8
18861	do	do	Slag	(2)	149	2.54	10.1	4.0	(2)	(2)

INDIANA.

15352	Henryville	Clark	Dolomitic limestone	(2)	177	1.06	3.5	11.4	17.0	13
9688	(1)	do	Argillaceous dolomite	(2)	150	5.23	10.3	3.9	.0	3
11082	Brazil	Clay	Limestone	(2)	174	.66	4.3	9.3	17.3	11
11018	Milltown	Crawford	do	(2)	167	.56	3.3	12.1	16.3	11
11019	do	do	do	(2)	168	.66	3.6	11.1	15.0	7
11020	do	do	do	(2)	167	.60	3.5	11.4	15.3	11
11021	do	do	Argillaceous limestone	(2)	168	1.17	3.0	13.3	15.3	11
11022	do	do	Limestone	(2)	168	.37	4.5	8.9	16.7	6
11023	do	do	do	(2)	168	.61	4.4	9.1	15.7	7
11024	do	do	Pisolitic limestone	(2)	158	2.78	5.2	7.7	8.7	4
11025	do	do	Limestone	(2)	161	2.59	4.5	8.9	14.7	8
9859	St. Paul	Decatur	Argillaceous limestone	(2)	168	2.01	4.4	9.1	14.0	5
10114	do	do	do	(2)	168	1.01	4.0	10.0	13.3	5
11778	do	do	Limestone	(2)	166	1.62	4.7	8.5	12.3	6
14871	Eaton	Delaware	Dolomite	(2)	169	1.43	5.8	6.9	15.7	6
11066	Schnellville	Dubois	Siliceous limestone	(2)	169	2.58	3.8	7.5	15.3	12
19578	St. Anthony	do	Sandstone	11,250	135	5.82	10.2	3.9	6.7	4
19579	do	do	do	11,980	139	6.77	10.7	3.7	10.7	4
16723	New Paris	Elkhart	Argillaceous limestone	(2)	166	.12	4.0	10.0	12.0	9
15374	Floyds Knobs	Floyd	Limestone	(2)	164	2.43	4.7	8.5	13.3	6
15375	do	do	Feldspathic sandstone	(2)	132	9.64	11.8	3.4	3.7	4
15376	do	do	do	(2)	134	9.75	10.9	3.7	.0	3
11183	Huntington	Huntington	Dolomite	25,420	163	2.10	4.10	9.7	14.0	7
17944	do	do	Argillaceous dolomite	(2)	161	5.78	7.1	5.6	(2)	(2)
9811	Vernon	Jennings	Dolomite	(2)	159	4.30	5.0	8.0	15.3	9
10834	do	do	Limestone	(2)	167	2.08	3.9	10.2	15.3	9
10847	do	do	Dolomite	(2)	149	6.90	8.1	4.9	12.0	4
11235	do	do	Argillaceous dolomite	24,150	162	3.67	4.8	8.3	12.3	6
11236	do	do	Dolomite	27,490	164	1.45	5.7	7.0	14.7	11
11237	do	do	Limestone	15,330	166	1.00	4.5	8.9	13.3	6
11238	do	do	Argillaceous limestone	14,840	141	2.27	10.9	3.6	8.0	5
12889	Bedford	Lawrence	Limestone	(2)	143	7.75	(2)	(2)	.0	5

[1] Test not made.

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922*—Continued.

INDIANA—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
10256	Bloomington (east of)	Monroe	Limestone	(2)	(2)	(2)	(2)	(2)	12.0	4
10257	do	do	Argillaceous limestone	(2)	(2)	(2)	(2)	(2)	14.6	5
10493	do	do	Limestone	(2)	185	1.03	4.8	8.3	14.7	7
9860	Greencastle	Putman	do	(2)	168	.66	(2)	(2)	16.7	5
11818	do	do	do	(2)	167	.66	6.9	5.8	15.3	5
10727	do	do	do	(2)	160	1.07	7.3	5.5	9.0	3
10519	Fillmore	do	Argillaceous limestone	(2)	159	2.22	(2)	(2)	11.2	6
10520	do	do	do	(2)	162	2.00	(2)	(2)	12.0	6
10020	Elberfeld	Warrick	Limestone	(2)	159	3.81	4.5	8.9	15.3	9
9935	Bluffton	Wells	Dolomite	(2)	165	2.89	6.2	6.5	15.0	8
14730	Monon	White	do	(2)	170	.41	5.6	7.1	15.7	7
10693	(1)	(1)	Limestone	(2)	166	1.24	5.4	7.5	13.5	5
10694	(1)	(1)	Argillaceous limestone	(2)	148	8.75	8.9	4.5	.0	3
			IOWA.							
13913	Brandon	Black Hawk	Limestone	(2)	161	0.36	4.7	8.5	15.0	4
11783	Dubuque	Dubuque	Argillaceous dolomite	(2)	169	1.55	5.7	7.1	15.0	7
13903	Stone City	Jones	Dolomite	(2)	132	11.81	14.5	2.7	0.0	4
11614	Council Bluffs (near)	Mills	Limestone	(2)	166	.43	5.4	7.4	15.7	6
15961	(1)	Story	Dolomite	(2)	(2)	(2)	6.4	6.3	(2)	2
15962	(1)	do	Limestone	(2)	(2)	(2)	3.4	11.8	(2)	(2)
			KANSAS.							
9599	Fort Scott (7 miles west of).	Bourbon	Limestone breccia	7,380	147	5.11	12.5	3.2	5.0	3
15939	Sedan	Chautauqua	Argillaceous limestone	(2)	155	3.64	9.2	4.4	8.7	4
11683	Lawrence	Douglas	do	(2)	154	4.40	10.7	3.7	14.7	6
11684	do	do	do	(2)	152	3.97	7.6	5.3	4.0	4
11687	Lawrence (near)	do	do	(2)	158	2.40	6.1	6.6	8.7	4
11689	Lecompton	do	Cherty limestone	(2)	157	1.01	9.3	4.3	12.0	5
11681	Junction City	Geary	Argillaceous limestone	(2)	119	12.30	31.8	1.3	.0	3
11682	do	do	Cherty limestone	(2)	134	10.22	13.0	3.1	14.0	2

11695	do	Geary	Argillaceous limestone	(2)	149	5.44	13.7	2.9	(2)	(2)
11696	do	do	do	(2)	164	1.51	5.7	7.0	14.3	7
11686	Tonganoxie	Leavenworth	do	(2)	156	2.91	7.6	5.3	11.3	5
11692	Neeley	do	Limestone	(2)	155	2.60	8.3	4.8	15.7	6
9780	Beloit	Mitchell	Argillaceous limestone	(2)	143	6.71	18.2	2.2	4.3	4
11694	Council Grove	Morris	Chert	(2)	153	2.45	4.6	8.7	(2)	(2)
11693	Council Grove (near)	do	do	(2)	153	3.67	9.1	4.4	11.7	3
11677	Helmick	do	Argillaceous limestone	(2)	132	8.85	11.5	3.5	16.7	2
11678	do	do	do	(2)	122	9.19	30.1	1.3	2.7	3
11679	do	do	do	(2)	143	6.59	15.0	2.7	.0	3
11680	do	do	do	(2)	134	9.25	19.5	2.1	.0	3
14882	Woodruff (2½ miles west of).	Phillips	Sandstone	(2)	144	1.77	5.7	7.0	18.7	7
14711	(1)	Riley	Dolomite	(2)	174	2.20	4.0	10.0	15.3	10
11676	Levis	Shawnee	Limestone	(2)	165	1.35	5.1	7.8	13.3	8
11688	do	do	do	(2)	156	3.14	7.7	5.2	16.5	6
11685	Topeka	do	Argillaceous limestone	(2)	152	4.72	8.7	4.6	10.3	6
11690	do	do	do	(2)	151	4.99	7.7	5.2	12.0	5
11691	do	do	do	(2)	144	7.76	7.2	5.6	13.3	3
11697	do	do	do	(2)	160	2.42	6.7	6.0	13.0	6

KENTUCKY.

16746	Jackson	Breathitt	Feldspathic sandstone	(2)	153	4.62	8.6	4.7	0.0	5
11343	Princeton (near)	Caldwell	Cherty limestone	(2)	164	.48	4.5	8.9	16.7	8
16192	do	do	Limestone	(2)	167	.47	6.0	6.7	(2)	(2)
12754	Grayson (near)	Carter	Argillaceous limestone	(2)	167	.18	5.1	7.8	15.0	11
17060	Olive Hill	do	Limestone	(2)	169	.15	5.1	7.8	15.3	6
17075	do	do	Ferrugineous sandstone	(2)	(2)	(2)	17.6	2.3	.7	(2)
17093	do	do	Limestone	(2)	167	.61	4.5	8.9	15.3	8
17158	do	do	do	(2)	167	.65	4.9	8.2	14.0	6
10134	Lexington	Fayette	Argillaceous limestone	(2)	168	.19	6.1	6.6	16.0	4
10136	do	do	do	(2)	168	.17	5.5	7.3	12.7	4
16637	Nicholasville	Jessamine	do	(2)	171	1.14	7.0	5.7	(2)	6
17257	do	do	Limestone	(2)	167	1.15	5.3	7.6	14.0	5
17061	East Bernstadt	Laurel	Feldspathic sandstone	(2)	143	4.62	9.9	4.0	.7	4
16778	Bradenburg	Meade	Argillaceous limestone	(2)	143	7.34	9.5	4.2	.0	5
17011	Harrodsburg	Mercer	Crystalline limestone	(2)	169	.28	8.1	4.9	8.0	4
17658	do	do	Limestone	(2)	169	.20	6.0	6.7	16.7	5
17073	Livingston	Rockcastle	Siliceous dolomite	(2)	170	2.20	3.4	11.8	13.0	13
19599	Morehead	Rowan	Feldspathic sandstone	(2)	147	5.22	5.4	7.4	3.3	7
16313	(1)	do	Calcareous sandstone	(2)	147	5.09	5.8	6.9	(2)	11
16416	Elkton	Todd	Limestone	(2)	163	.63	5.2	7.7	(2)	7
10451	Cerulean Springs (near)	Trigg	Argillaceous limestone	(2)	167	.45	4.7	8.5	14.2	6
9829	(1)	(1)	Limestone	(2)	165	1.31	(2)	(2)	13.7	6
9830	(1)	(1)	Argillaceous limestone	(2)	165	.82	(2)	(2)	15.5	10

[1] Exact locality not known.

[2] Test not made.

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922*—Continued.

LOUISIANA.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
11241	New Orleans	Orleans	Argillaceous sandstone	(2)	128	11.35	19.1	2.1	14.7	6
18145	Florien	Sabine	Sandstone	(2)	135	6.29	7.0	5.7	16.3	9
20927	(1)	(1)	Granite	28,810	163	.47	4.0	10.0	19.3	8

MAINE.

11483	Auburn	Androscoggin	Biotite gneiss	(2)	170	0.58	4.4	9.1	18.0	8
12755	Portland	Cumberland	Sericite schist	(2)	170	.18	4.1	9.8	17.3	14
12756	....do	....do	Granite	(2)	166	.24	3.8	10.5	18.0	10
10219	North Jay	Franklin	....do	21,260	164	.84	2.7	14.8	19.3	7
11416	....do	....do	Biotite granite	25,090	(2)	(2)	(2)	(2)	17.3	7
12283	....do	....do	Granite	(2)	163	.69	4.4	9.1	19.0	11
9997	Mount Desert	Hancock	....do	19,780	165	.21	3.4	11.8	19.7	9
10233	....do	....do	....do	19,220	162	.90	4.1	9.8	18.7	8
10234	....do	....do	....do	24,700	160	.67	3.2	12.5	18.7	12
[1] Exact locality not known.										
[2] Test not made.										
16304	....do	....do	....do	(2)	164	.51	3.3	12.1	17.3	12
10988	Ship Harbor	....do	....do	28,650	165	.21	(2)	(2)	19.3	18
10989	....do	....do	....do	26,500	163	.31	(2)	(2)	18.7	13
10990	....do	....do	....do	32,450	164	.42	(2)	(2)	19.3	16
17439	Swans Island	....do	Biotite granite	36,530	163	.55	3.4	11.8	18.7	13
13862	(1)	....do	Granite	(2)	(2)	(2)	3.7	10.8	18.7	10
11327	Hallowell	Kennebec	....do	25,380	162	.78	3.0	13.2	18.7	8
11486	....do	....do	....do	27,760	163	.72	3.2	12.5	18.7	7
11408	Litchfield	....do	Biotite gneiss	(2)	168	.40	4.0	10.0	19.3	6
11468	Winslow	....do	Mica schist	(2)	174	.47	4.1	9.8	15.0	8
11215	Camden	Knox	Biotite quartzite	18,040	172	.22	3.4	11.8	16.7	11
17022	Clark Island	....do	Biotite granite	24,915	168	.63	2.6	15.4	19.0	11
17023	....do	....do	....do	22,315	168	.65	2.6	15.4	18.7	12
17024	....do	....do	....do	30,825	169	.53	2.5	16.0	18.0	11
9996	Long Cove	....do	Granite	17,540	168	.22	3.3	12.1	19.2	10
10249	....do	....do	Biotite granite	22,500	165	.86	3.0	13.3	19.3	13
10250	....do	....do	Granite	22,330	166	.82	3.5	11.4	19.3	8
13868	....do	....do	Biotite granite	(2)	(2)	(2)	3.4	11.8	18.7	10
13869	....do	....do	....do	(2)	(2)	(2)	3.3	12.1	18.7	10
9706	Rockland	....do	Marble	(2)	175	.40	4.3	9.3	17.0	4

11411	Rockport	do	Granite	31,580	(2)	(2)	(2)	(2)	18.0	8
9781	St. George	do	do	18,780	(2)	(2)	(2)	(2)	(2)	12
9865	do	do	do	17,150	(2)	(2)	(2)	(2)	18.8	9
11418	do	do	Biotite granite	25,180	(2)	(2)	(2)	(2)	18.0	10
19144	do	do	do	(2)	165	.57	3.1	12.9	19.0	13
10019	Vinal Haven	do	do	21,650	165	.25	3.1	12.9	19.3	14
11414	do	do	do	32,090	(2)	(2)	(2)	(2)	19.3	11
13854	do	do	Granite	(2)	(2)	(2)	3.3	12.1	18.7	13
19212	do	do	Biotite granite	33,485	165	.43	3.4	11.8	18.7	11
13855	do	do	do	(2)	(2)	(2)	3.5	11.4	18.0	14
13866	State Point	do	do	(2)	(2)	(2)	3.4	11.8	18.0	10
11406	Bowdoinham	Sagadahoc	Biotite gneiss	(2)	165	.89	9.5	4.2	17.3	3
11421	do	do	Gneissoid granite	(2)	159	1.63	7.1	5.6	(2)	(2)
11422	do	do	Biotite gneiss	(2)	163	1.74	12.4	3.2	(2)	(2)
11404	Richmond	do	do	(2)	163	1.79	11.4	3.5	17.0	5
11405	do	do	Granite	(2)	163	.76	4.1	9.8	18.0	5
11407	do	do	Biotite gneiss	(2)	170	1.41	8.4	4.8	17.3	3

MARYLAND.

16850	Ashland	Baltimore	Blast furnace slag	(2)	162	2.04	6.7	6.0	(2)	(2)
16851	do	do	do	(2)	138	9.91	19.0	2.1	15.3	6
16852	do	do	do	(2)	166	3.52	6.5	6.2	(2)	6
16853	do	do	do	(2)	175	.57	4.6	8.7	(2)	(2)
14167	Baltimore		Copper blast furnace slag	(2)	203	.97	5.5	7.3	17.3	13
14179	do		do	(2)	205	.95	5.2	7.7	15.3	11
14193	do		do	(2)	199	.72	3.1	12.9	(2)	(2)
20319	do		Feldspathic quartzite	(2)	169	.21	(2)	(2)	18.7	12
11556	Bare Hills	Baltimore	Serpentine rock	(2)	161	1.02	7.7	5.2	12.3	5
20558	Butler	do	Muscovite gneiss	(2)	168	.56	5.1	7.8	18.7	3
19028	Cockeysville (near)	do	Marble	(2)	163	.19	5.6	7.1	14.0	6
11335	Raspeburg	do	Hornblende schist	(2)	186	.41	3.5	11.4	17.3	15
11336	do	do	Hornblende gneiss	(2)	165	.89	6.7	6.0	15.0	7
20116	Sparks	do	Biotite gneiss	(2)	169	1.24	6.9	5.8	18.3	5
20167	do	do	Biotite granite	(2)	170	1.26	8.4	4.8	17.0	6
18639	Texas	do	Marble	(2)	172	.22	7.6	5.3	14.0	6
14646	Towson	do	do	(2)	175	.38	9.9	4.0	11.0	4
19508	do	do	Micaceous marble	(2)	175	.21	4.2	9.5	16.0	8
20114	do	do	Gneissoid granite	(2)	165	.57	4.9	8.2	19.3	10
15387	do	do	Marble	(2)	172	.30	5.4	7.4	(2)	(2)
12802	Port Deposit	Cecil	Hornblende biotite schist	(2)	169	.01	2.8	14.3	17.3	17
20318	do	do	Biotite gneiss	(2)	163	.57	(2)	(2)	18.3	9
15161	Sylmar-Rising Sun	do	Hypersthene granite	(2)	183	2.02	(2)	(2)	18.0	10
10105	Frederick	Frederick	Limestone	(2)	(2)	(2)	3.0	15.3	16.0	5
16196	do	do	Siliceous limestone	(2)	169	.25	2.9	13.8	16.7	11
12930	Lime Kiln	do	Argillaceous limestone	(2)	172	.14	2.6	15.4	(2)	(2)
19692	do	do	do	(2)	170	.11	4.1	9.8	16.0	6
12360	Belair (near)	Harford	Altered gabbro	(2)	189	.18	2.6	15.0	18.0	19
14348	do	do	Amphibolite	2)	190	.17	2.8	14.3	18.7	21

[1] Exact locality not known.

[2] Test not made.

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922*—Continued.

MARYLAND—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
20191	Havre de Grace	Harford	Hornblende schist	(2)	185	.18	2.9	13.8	17.7	16
13669	Kingsville (near)	do	Amphibolite	(2)	191	.41	4.0	10.0	17.3	10
10021	North Laurel	Howard	do	(2)	200	.46	3.5	11.4	17.7	8
20316	Savage	do	do	(2)	190	.48	(2)	(2)	17.7	14
20388	do	do	do	(2)	190	.23	1.5	26.7	19.3	30
17458	(1)	do	Hornblende gneiss	(2)	167	.78	4.6	8.7	17.3	8
12607	Bethesda (near)	Montgomery	Mica gneiss	(2)	168	.33	3.4	11.8	18.7	9
10101	Dickerson	do	Diabase	(2)	(2)	(2)	1.4	28.6	18.5	21
12766	do	do	do	(2)	181	.12	2.6	15.4	(2)	(2)
14264	do	do	do	(2)	187	.24	(2)	(2)	18.7	20
11152	Halpine	do	Epidote hornblende gneiss	(2)	198	.65	3.1	12.9	16.0	11
11153	do	do	Biotite granite	(2)	171	.42	3.1	12.9	18.7	13
13728	(1)	Prince Georges	Diabase	(2)	(2)	(2)	1.6	25.0	(2)	(2)
11342	Cavetown	Washington	Marble	(2)	171	.29	3.6	11.1	16.0	9
14424	Weverton	do	Quartzite	(2)	167	.31	3.1	12.9	(2)	(2)

MASSACHUSETTS.

10016	Great Barrington	Berkshire	Marble	(2)	175	0.37	5.6	7.1	15.3	4
11508	Lee	do	Dolomitic marble	(2)	179	.31	7.2	5.6	11.2	2
10288	Otis	do	Granite	18,260	166	.71	2.6	15.4	18.0	9
15457	Pittsfield (west)	do	Marble	(2)	172	.65	5.1	7.8	13.3	7
12473	Windsor	do	Quartzite	(2)	164	.24	3.9	10.3	18.7	12
11017	Acushnet	Bristol	Chlorite gneiss	(2)	167	.44	2.4	16.6	19.0	17
9770	Fall River	do	Biotite gneiss	(2)	178	.27	2.7	14.8	18.2	17
10247	Seekonk	do	Feldspathic sandstone	(2)	167	.76	4.0	10.0	18.7	12
15178	do	do	do	(2)	165	1.21	4.3	9.3	18.7	14
15179	do	do	Siliceous slate	(2)	164	1.84	3.9	10.3	(2)	(2)
11413	Beverly	Essex	Hornblende granite	28,580	(2)	(2)	(2)	(2)	19.3	9
12289–A	do	do	Biotite syenite	(2)	(2)	.87	(2)	(2)	17.0	24
12289–B	do	do	Hornblende granite	(2)	181	.87	(2)	(2)	19.0	15
20878	Danvers	do	Diorite	(2)	186	.35	2.8	14.3	18.3	10
9649	Gloucester	do	Granite	19,580	165	.32	3.7	10.8	19.7	10
9650	do	do	do	18,125	165	.35	4.4	9.1	19.7	10
19958	Essex	do	do	(2)	163	.51	4.8	8.3	18.7	8

[2] Test not made.

19960	Ipswich	do	Altered diabase	(2)	180	.38	3.9	10.3	18.0		6
11245	Lynn	do	Rhyolite	(2)	165	.28	3.4	11.8	(2)	(2)	
18930	Marblehead	do	Diorite	(2)	179	.25	2.5	16.0	18.0		20
20812	Newbury	do	Aplitic diorite	(2)	174	.64	3.0	13.3	18.7		13
12256	Newburyport	do	Grenodiorite	(2)	175	.34	3.6	11.1	18.1		10
20379	do	do	Seritite-hornblende schist	(2)	190	.19	3.1	12.9	18.3		12
20380	do	do	Amphibolite	(2)	174	.23	2.4	16.7	18.7		21
13566	Peabody	do	Altered diorite	(2)	181	.20	2.9	13.9	18.0		16
9651	Rockport	do	do	22,385	165	.33	4.9	8.2	19.3		7
9652	do	do	do	18,780	165	.21	3.6	11.1	19.3		11
15174	do	do	Granite	34,200	(2)	(2)	(2)	(2)	(2)		11
15175	do	do	do	31,225	(2)	(2)	(2)	(2)	(2)		10
15176	do	do	do	24,275	(2)	(2)	(2)	(2)	(2)		8
15177	do	do	do	32,125	(2)	(2)	(2)	(2)	(2)		11
19959	do	do	do	(2)	163	.40	3.8	10.5	18.3		7
20556	Rowley	do	Ferruginous chert	(2)	163	.50	4.9	8.2	18.7		11
20434	Swampscott	do	Augite syenite	(2)	185	.18	2.5	16.0	17.7		17
20435	do	do	Porphyritic diabase	(2)	186	.49	2.7	14.8	18.0		18
11268	(1)	do	Biotite granite	(2)	170	.72	3.1	12.9	18.3		10
14987	(1)	do	Trachytic rhyolite	(2)	166	.10	3.1	12.9	19.3		15
18545	Deerfield	Franklin	Diabase	(2)	184	.64	1.9	21.0	17.7		31
19693	do	do	Altered diabase	(2)	178	.18	1.7	23.5	18.3		32
12220	Greenfield	do	do	(2)	185	.33	(2)	(2)	18.0		30
12215	Westfield	Hampden	Diabase	(2)	185	.14	2.2	18.2	18.0		26
15156	Cummington	Hampshire	Mica schist	(2)	166	1.54	6.2	6.5	17.0		9
15157	do	do	Chlorite mica schist	(2)	165	1.35	7.7	5.2	17.3		6
15158	West Cummington	do	Mica schist	(2)	131	.55	4.3	9.3	17.7		7
11795	Ayers	Middlesex	Calcareous quartzite	(2)	168	.85	6.0	6.6	11.0		12
11796	do	do	Granite	(2)	159	1.34	9.4	4.3	17.7		5
11871	do	do	Biotite gneiss	(2)	168	.30	4.9	8.2	19.0		7
12253	Chelmsford	do	Granite	(2)	162	.85	4.1	9.7	18.0		10
14890	do	do	Muscovite granite	(2)	163	.88	3.9	10.3	18.7		8
11720	Groton	do	Granite	22,540	162	.76	5.2	7.7	18.0		8
12090-A	Malden	do	Altered rhyolite	(2)	[3] 169	[3] .21	[3] 2.8	[3] 14.3	18.7	(2)	
12090-B	do	do	do	(2)	[3] 169	[3] .21	[3] 2.8	[3] 14.3	17.3	(2)	
13560	do	do	Altered andesite	(2)	169	.11	2.0	20.0	18.7		19
13563	do	do	Altered rhyolite	(2)	165	.11	3.0	13.3	18.7		17
12088-A	Medford	do	Altered diabase	(2)	[4] 179	[4] .28	[4] 4.1	[4] 9.8	18.0	(2)	
12088-B	do	do	Fragmental rhyolite	(2)	[4] 179	[4] .28	[4] 4.1	[4] 9.8	18.0	(2)	
12088-C	do	do	Altered rhyolite	(2)	[4] 179	[4] .28	[4] 4.1	[4] 9.8	18.7	(2)	
12088-D	do	do	Altered granite	(2)	[4] 179	[4] .28	[4] 4.1	[4] 9.8	18.0	(2)	
12141-A	Melrose	do	Altered rhyolite	(2)	[4] 170	[4] .12	[4] 2.6	[4] 15.4	19.3		17
12141-B	do	do	do	(2)	[4] 170	[4] .12	[4] 2.6	[4] 15.4	18.7		20
12141-C	do	do	do	(2)	[4] 170	[4] .12	[4] 2.6	[4] 15.4	18.7		14
12141-D	do	do	do	(2)	[4] 170	[4] .12	[4] 2.6	[4] 15.4	16.7	(2)	
12145-A	Stony Brook	do	Altered diabase	(2)	[4] 179	[4] .22	[4] 3.5	[4] 11.4	17.3		13
12145-B	do	do	Altered granite	(2)	[4] 179	[4] .22	[4] 3.5	[4] 11.4	18.7		11
12145-C	do	do	Altered rhyolite	(2)	[4] 179	[4] .22	[4] 3.5	[4] 11.4	(2)		16
12061-A	Waltham	do	Hornblende trachyte	(2)	[3] 180	[3] .32	[3] 2.5	[3] 16.0	17.3		18
12061-B	do	do	do	(2)	[3] 180	[3] .32	[3] 2.5	[3] 16.0	18.0		18

[1] Exact locality not known. [2] Test not made. [3] Test made on mixtures of "A" and "B." [4] Test made on mixtures of "A," "B," "C," and "D."

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922*—Continued.

MASSACHUSETTS—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
13885	Westford	Middlesex	Granite	(2)	(2)	(2)	4.6	8.7	18.0	9
13894	do	do	do	(2)	(2)	(2)	3.1	12.9	19.3	9
19685	Weston	do	Altered diabase	(2)	180	.20	3.1	12.9	18.3	12
12324	West Townsend	do	Granite	(2)	162	1.14	7.4	5.4	18.7	8
12852	do	do	Biotite granite	(2)	163	.26	6.9	5.8	17.3	6
13148	do	do	Granite	25,500	(2)	(2)	(2)	(2)	18.0	10
17198	Winchester	do	Hornblende gabbro	(2)	189	.20	3.0	13.3	18.0	13
19300	Woburn	do	Olivine diabase	(2)	190	.45	2.7	14.8	18.7	31
12063–A	Brookline	Norfolk	Altered andesite	(2)	[4]174	[4].32	[4]2.0	[4]20.0	18.0	22
12063–B	do	do	do	(2)	[4]174	[4].32	[4]2.0	[4]20.0	18.0	(2)
12063–C	do	do	do	(2)	[4]174	[4].32	[4]2.0	[4]20.0	18.7	(2)
12063–D	do	do	do	(2)	[4]174	[4].32	[4]2.0	[4]20.0	18.7	(2)
12195	Quincy	do	Slate	(2)	168	.63	4.3	9.3	15.3	18
13562–A	do	do	Granite porphyry	(2)	166	.41	[4]2.7	[4]14.8	18.0	11
13562–B	do	do	Altered slate	(2)	175	.16	[4]2.7	[4]14.8	18.0	17
13562–C	do	do	Granite	(2)	164	.40	[4]2.7	[4]14.8	18.7	11
13562–D	do	do	do	(2)	163	.35	[4]2.7	[4]14.8	18.0	9
14652	do	do	Altered granite	(2)	163	.91	5.3	7.6	18.7	(2)
14897	Randolph	do	Feldspathic quartzite	(2)	163	.91	3.3	12.1	18.7	10
15292	Hingham	Plymouth	Aplitic granite	(2)	130	.42	2.7	14.8	18.3	18
11991–A	Boston	Suffolk	Feldspathic sandstone	(2)	[3]166	[3].75	[3]7.1	[3]5.6	18.7	13
11991–B	do	do	do	(2)	[3]166	[3].75	[3]7.1	[3]5.6	8.3	4
12050	do	do	Altered rhyolite	(2)	168	.43	5.8	6.9	18.7	7
12051	do	do	Altered trachyte	(2)	175	.17	5.5	7.2	18.7	(2)
12056	do	do	Rhyolite breccia	(2)	167	.18	5.9	6.8	18.7	(2)
12089–A	do	do	Altered rhyolite	(2)	[4]166	[4].23	[4]3.2	[4]12.5	19.0	25
12089–B	do	do	do	(2)	[4]166	[4].23	[4]3.2	[4]12.5	18.7	(2)
12089–C	do	do	do	(2)	[4]166	[4].23	[4]3.2	[4]12.5	18.3	(2)
13559	do	do	Rhyolite breccia	(2)	166	.71	4.4	9.1	18.7	8
13561	do	do	Conglomerate	(2)	160	.63	5.0	8.0	18.0	7
13564	do	do	Altered granite	(2)	168	.18	3.4	11.8	18.7	10
13565	do	do	Diorite	(2)	182	.25	2.8	14.3	18.0	13
13567	do	do	Altered rhyolite	(2)	172	.39	4.4	9.1	17.3	11
14878	do	do	Altered diabase	(2)	192	.19	1.8	22.2	18.7	24
14917	do	do	Granite	(2)	167	.25	4.1	9.8	18.7	10
15164	do	do	Altered diabase	(2)	192	.62	2.2	18.2	18.0	18
18910	do	do	Rhyolite breccia	(2)	165	.69	3.7	10.8	19.3	10
18911	do	do	Altered andesite	(2)	178	.37	3.0	13.3	18.3	10
18912	do	do	Rhyolite breccia	(2)	167	.43	5.0	8.0	17.7	8

18913	do	do	do	(2)	165	.45	2.5	16.0	17.3	12
18914	do	do	Altered rhyolite	(2)	180	.38	4.2	9.5	18.7	12
18915	do	do	Volcanic conglomerate	(2)	165	.71	4.8	8.3	17.3	8
18916	do	do	do	(2)	166	.53	6.6	6.1	(2)	(2)
18917	do	do	Quartz syenite	(2)	165	.35	3.5	11.4	18.7	11
18918	do	do	Altered diabase	(2)	191	.17	2.1	19.1	18.7	29
18919	do	do	Altered rhyolite	(2)	162	1.22	4.3	9.3	18.7	17
18920	do	do	do	(2)	166	.58	2.7	14.8	19.0	25
18921	do	do	Altered dacite	(2)	165	.21	4.1	9.8	11.7	(2)
19225	do	do	Conglomerate	(2)	164	.98	7.5	5.3	(2)	(2)
19226	do	do	Granite	(2)	163	.54	4.0	10.0	18.3	10
19227	do	do	Altered rhyolite	(2)	164	.38	3.2	12.5	19.3	12
19736	do	do	Conglomerate	19,710	167	.48	4.5	8.9	17.7	28
10935	Fayville	Worcester	Granite gneiss	(2)	162	.75	3.0	13.3	18.7	11
11250	Fitchburg	do	Biotite granite	(2)	166	.79	5.7	7.0	17.9	7
17503	Southbridge	do	Biotite schist	(2)	172	.62	4.3	9.3	16.3	11
10089	West Rutland	do	Granite	(2)	164	.16	2.9	13.8	18.6	12
10090	do	do	do	(2)	161	.79	6.7	6.0	18.0	7
10091	do	do	Biotite gneiss	(2)	168	.89	6.5	6.2	16.3	9
18741	Whitins	do	Gneissoid granite	32,075	164	.29	(2)	(2)	18.7	8
18742	do	do	do	23,985	164	.54	(2)	(2)	18.3	6

MICHIGAN.

20371	Petoskey	Emmett	Argillaceous limestone	(2)	175	1.30	5.9	6.8	13.3	7
20372	do	do	do	(2)	164	1.31	5.3	7.6	15.7	6
20373	do	do	do	(2)	165	.94	6.3	6.4	16.3	3
20374	do	do	do	(2)	165	.75	4.9	8.2	14.0	9
9855	Marquette	Marquette	Hornblende gneiss	(2)	184	.62	(2)	(2)	19.3	22
9856	do	do	Altered diabase	(2)	184	.66	(2)	(2)	18.7	25
9857	do	do	Amphibolite	(2)	181	.57	(2)	(2)	18.0	17
9975	do	do	Altered diabase	(2)	181	.52	2.1	19.1	19.3	12
9976	do	do	do	(2)	175	.42	3.8	10.5	16.0	13
9977	do	do	do	(2)	184	.60	3.1	12.9	18.3	11
11223	Dundee	Monroe	Limestone	(2)	156	1.32	9.0	4.4	.0	4
9889	Monroe	do	Dolomite	(2)	175	.64	3.6	11.1	17.0	16
9988	do	do	Argillaceous dolomite	11,750	165	3.03	4.2	9.5	(2)	5
9989	do	do	do	(2)	175	1.47	4.7	8.5	13.5	15
10041	do	do	Dolomite	(2)	172	1.80	3.6	11.1	17.0	17
15771	Scofield	do	do	(2)	163	2.26	5.2	7.7	13.3	7
11752	Calcite	Presque Isle	Limestone	(2)	157	1.88	6.9	5.6	5.9	4
14623	Rogers	do	do	(2)	162	1.30	9.5	4.3	13.3	5
14689	Inwood	Schoolcraft	Dolomitic marble	(2)	177	.46	4.8	8.3	16.0	8
18864	Detroit	Wayne	Slag	(2)	119	5.63	18.3	2.2	(2)	(2)
9888	Sibley	do	Limestone	(2)	159	2.82	12.4	3.2	15.3	6

[2] Test not made. [3] Test made on mixtures of "A" and "B." [4] Test made on mixtures of "A," "B," "C," and "D."

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922*—Continued.

MINNESOTA.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
11703	Sauk Rapids	Benton	Biotite granite	(2)	165	0.35	4.0	10.0	19.0	9
11704	do	do	do	(2)	163	.48	7.0	5.7	18.7	7
11705	do	do	Hornblende granite	(2)	169	.32	3.2	12.5	18.7	8
11341	Mankato	Blue Earth	Calcareous sandstone	(2)	156	4.80	6.4	6.3	5.3	2
10485	Jasper	Rock	Quartzite	(2)	164	.18	2.0	20.0	19.7	17
14495	(1)	do	do	(2)	168	.38	2.4	16.7	(2)	(2)
15214	Mesaba (near)	St. Louis	Epidosite	(2)	218	.48	2.6	15.4	18.7	20
13725	(1)	(1)	Sandstone	(2)	187	.24	3.8	10.6	18.7	18

MISSISSIPPI.

10287	(1)	Holmes	Sandstone	(2)	144	4.70	7.8	5.1	18.0	8
16131	Chunky	Newton	do	(2)	124	8.96	9.8	4.1	3.3	5
12692	Pontotoc	Pontotoc	Siliceous limestone	(2)	160	.92	7.0	5.7	17.0	9
11791	Brandon	Rankin	Argillaceous limestone	(2)	156	3.08	5.6	7.2	12.0	5
14283	Iuka (near)	Tishomingo	Weathered chert	(2)	127	7.89	12.2	3.3	(2)	(2)
10098	New Albany	Union	Sandstone	(2)	156	2.58	11.1	3.6	18.7	7

MISSOURI.

11510	Cassville	Barry	Marble	(2)	169	0.70	5.7	7.0	11.7	3
15144	Cape Girardeau	Cape Girardeau	Limestone	(2)	168	.37	4.3	9.3	17.0	5
10169	West Line	Cass	do	16,690	156	1.09	11.5	3.5	13.5	5
10410	(1)	do	do	(2)	167	.53	5.6	7.2	14.7	6
19634	Ironton	Iron	Porphyry	(2)	205	.46	5.4	7.4	18.0	9
20302	do	do	Fragmental hematite	(2)	201	.25	2.4	16.7	18.3	16
11509	Kansas City	Jackson	Marble	(2)	165	.66	7.5	5.3	8.3	2
14731	do	do	Limestone	(2)	164	.74	5.5	7.3	13.3	5
14448	Webb City (near)	Jasper	Chert	(2)	155	2.96	4.4	9.1	19.7	(2)
20953	Prosperity	do	do	(2)	162	.30	5.5	7.3	19.3	4
10251	Hamburg	St. Charles	Limestone	(2)	167	.63	5.2	7.7	12.3	4
10252	do	do	do	(2)	164	.90	7.3	5.5	10.7	3
11743	University City	St. Louis	do	(2)	158	3.81	5.2	7.7	14.6	7
11789	Digus	do	do	(2)	163	2.10	6.7	5.9	14.0	5
10237	(1)	do	do	(2)	167	.73	4.0	10.0	16.0	7
10238	(1)	do	do	(2)	167	.75	5.1	7.9	15.3	5

MONTANA.

15898	(1)	Deer Lodge	Quartzite	(2)	162	1.10	5.6	7.1	(2)	(2)
16155	Anaconda	do	do	(2)	163	.34	4.3	9.3	(2)	(2)
14363	Logan	Gallatin	Limestone	(2)	169	.36	3.4	11.8	(2)	(2)
14466	Trident	do	do	(2)	166	.72	6.8	5.9	(2)	(2)
14467	do	do	Siliceous limestone	(2)	164	1.43	3.4	7.8	17.0	14
15955	East Helena	Lewis and Clark	Smelter slag	(2)	212	1.03	5.9	6.8	17.3	12
14360	Livingston (near)	Park	Basalt	(2)	178	1.95	4.6	8.7	16.7	10
15899	(1)	Wibaux	Burnt shale	(2)	122	13.77	23.8	1.7	(2)	(2)
13897	Billings	Yellowstone	Sandstone	(2)	135	9.27	26.3	1.5	13.5	7

NEBRASKA.

16080	Louisville	Cass	Argillaceous limestone	(2)	163	2.44	5.8	6.9	14.7	6
16081	do	do	Ferruginous clay	(2)	130	23.50	18.2	2.2	(2)	(2)
18831	Louisville (near)	do	Limestone	17,010	160	3.02	4.6	8.7	11.3	6
18832	Louisville	do	do	14,070	163	2.05	6.2	6.5	12.0	3
18833	do	do	do	18,670	164	1.82	4.9	8.2	12.7	6
9905	Nehawka	do	Argillaceous limestone	(2)	168	.75	4.7	8.5	16.0	6
14581	(1)	do	Cherty limestone	(2)	163	1.27	4.8	8.3	15.0	7
14582	(1)	do	Siliceous limestone	(2)	162	2.65	6.7	6.0	13.3	5

NEW HAMPSHIRE.

11339	Redstone	Carroll	Biotite granite	21,910	161	0.61	5.7	7.0	18.0	7
12229	do	do	Granite	(2)	162	.65	6.5	6.2	18.0	7
9895	Fitzwilliam	Cheshire	do	10,825	165	.33	3.8	10.5	18.7	9
9946	do	do	do	26,100	165	.32	3.7	10.8	17.7	9
9893	Marlboro	do	do	15,615	165	.35	6.7	6.0	17.3	8
9894	do	do	do	15,285	165	.52	5.7	7.0	19.3	6
13864	do	do	do	(2)	(2)	(2)	4.0	10.0	16.7	8
13883	Brookline	Hillsboro	do	(2)	(2)	(2)	3.3	12.1	18.0	8
11234	Milford	do	Biotite granite	18,250	163	.81	3.3	12.1	18.3	7
11419	do	do	Granite	19,800	(2)	(2)	(2)	(2)	18.0	8
13860	South Milford	do	do	(2)	(2)	(2)	5.1	7.8	18.0	7
13861	(1)	do	do	(2)	(2)	(2)	4.3	9.3	17.3	8
9994	Allenstown	Merrimac	do	18,110	165	.61	2.5	16.0	19.0	11
13867	do	do	do	(2)	(2)	(2)	3.4	11.8	18.7	10
14892	Concord	do	do	(2)	164	.75	4.6	8.7	17.7	10
13863	do	do	do	(2)	(2)	(2)	3.4	11.8	18.7	9
12185	Webb	do	do	(2)	163	2.30	4.4	9.1	17.0	7
11711	Dover	Strafford	Siliceous marble	(2)	173	.09	4.8	8.3	17.7	15
12325	do	do	Slate	(2)	177	.12	(2)	(2)	14.7	13

[1] Exact locality nor known.

[2] Test not made.

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922*—Continued.

NEW JERSEY.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
12263	Upper Montclair	Essex	Altered basalt	(2)	183	0.20	2.9	13.8	18.7	43
10705	Lambertville	Hunterdon	Diabase	(2)	183	.46	2.8	14.3	18.7	19
12386	do	do	Gabbritic diabase	(2)	184	.22	3.3	12.1	18.2	29
12333	Middle Valley	do	Hornblende gneiss	(2)	189	.11	3.4	11.8	18.0	15
14869	Vernoy	do	Dolomite	(2)	177	.39	3.0	13.3	15.3	8
16027	Califon	do	Dolomite marble	(2)	177	.38	3.5	11.4	15.7	11
16029	do	do	do	(2)	177	.48	3.4	11.8	16.0	14
11914	Pennington	Mercer	Altered diabase	(2)	182	.24	3.4	11.8	18.3	18
14379	Chrome	Middlesex	Copper slag	(2)	221	.45	4.1	9.8	16.7	25
14644	Perth Amboy	do	do	(2)	218	1.35	2.9	13.8	16.7	15
18723	Dover	Morris	Slag	(2)	114	8.53	17.6	2.3	(2)	(2)
11996	Millington	do	Basalt	(2)	185	.47	2.2	18.0	16.7	15
12421	Morristown	do	Altered gabbro	(2)	170	.71	(2)	(2)	17.7	12
9921	Mount Hope	do	Pyroxene granite	(2)	178	.44	2.4	16.7	18.3	9
10472	Boundbrook	Somerset	Altered diabase	(2)	184	.06	2.2	18.2	18.7	30
12101	do	do	Basalt	(2)	182	.24	2.6	15.2	18.7	35
14641	do	do	Diabase	(2)	186	.15	1.6	25.0	19.3	27
14973	Chimney Rock	do	Basalt	(2)	180	.59	2.1	19.0	18.0	18
14982	do	do	Altered basalt	(2)	183	.29	2.2	18.2	18.7	21
14983	do	do	do	(2)	186	.21	1.8	22.2	18.0	31
14638	(1)	(1)	Basalt	(2)	183	.15	2.4	16.4	17.6	12

NEW MEXICO.

9768	Silver City	Grant	Altered granite porphyry	(2)	156	1.73	3.4	11.8	18.6	18
19450	Deming (near)	Luna	Feldspathic quartzite	(2)	162	.92	3.1	12.9	(2)	(2)
17747	Mora	Mora	Pegmatitic granite	(2)	160	.82	14.4	2.8	(2)	(2)
17737	Valley Ranch	San Miguel	Aplitic diorite	(2)	169	3.13	5.1	7.8	(2)	(2)
17739	do	do	Biotite schist	(2)	180	.26	3.8	10.5	16.7	14
16202	Las Vegas (near)	do	Siliceous clay limestone	(2)	166	.42	4.6	8.7	16.7	8
17292	Laguna (near)	Valencia	Calcareous sandstone	(2)	152	3.92	6.1	6.6	11.3	7

13558	Stoneco	Dutchess	Siliceous dolomite	(2)	174	0.25	2.6	15.4	16.3	29
11505	Wingdale	do	Dolomitic marble	(2)	177	.20	9.7	4.1	10.0	3
16543	Akron	Erie	Limestone	(2)	168	.19	5.4	7.4	(2)	10
12729	Buffalo	do	do	(2)	169	.18	4.2	9.8	14.0	8
18719	do	do	Slag	(2)	120	6.32	15.8	2.5	(2)	(2)
18720	do	do	do	(2)	128	5.72	15.4	2.6	(2)	(2)
16544	(1)	do	Limestone	(2)	164	.85	6.2	6.5	16.0	10
16154	Jay	Essex	Gabbro	(2)	179	.31	2.7	14.8	17.6	10
11953	Mayfield	Fulton	Argillaceous limestone	(2)	176	.26	3.7	10.8	16.0	16
12043	Leroy	Genesee	Cherty limestone	(2)	165	3.58	5.7	7.0	19.3	8
12727	North Leroy	do	Limestone	27,390	168	.30	3.9	10.3	15.3	13
10097	Dolgeville	Herkimer	Dolomite	(2)	173	.66	3.1	12.9	15.3	10
11423	Little Falls	do	Hornblende gneiss	(2)	176	.51	3.7	10.8	18.0	13
12117	do	do	do	(2)	176	.83	4.5	8.9	17.3	8
10236	Alexandria Bay	Jefferson	Biotite granite	28,130	(2)	(2)	(2)	(2)	18.7	12
10319	do	do	Granite	28,900	163	.49	2.8	14.3	18.0	10
13890	do	do	do	(2)	(2)	(2)	2.9	13.8	18.7	11
18661	Chaumont	do	Limestone	(2)	169	.19	7.6	5.3	16.7	6
18660	Felts Mills	do	do	28,350	168	.60	4.9	8.2	14.7	12
18659	Watertown	do	do	(2)	168	.49	6.4	6.3	13.3	6
11903	Amsterdam	Montgomery	do	(2)	162	.29	4.9	8.2	15.3	14
14462	Oaks Corners	Ontario	Argillaceous limestone	(2)	166	1.63	3.8	10.5	14.3	8
18327	Oaks (Phelps)	do	Argillaceous dolomite	32,135	164	2.30	4.8	8.3	18.7	24
13557	Cedar Cliff	Orange	Limestone	(2)	176	.17	3.1	12.9	14.0	19
10042	Albion	Orleans	Sandstone	20,000	(2)	(2)	3.4	11.8	17.3	9
17327	do	do	do	(2)	152	3.07	3.9	10.3	14.7	10
17328	do	do	do	(2)	150	3.56	4.0	10.0	15.0	9
20353	do	do	do	24,345	149	3.59	4.3	9.3	15.3	9
12714	Oregon	Putnam	Granite gneiss	(2)	166	.27	5.2	7.7	18.7	9
10093	Rockland Lake	Rockland	Gabbroitic diabase	(2)	187	.19	3.0	13.3	19.0	13
10094	do	do	do	(2)	183	.27	3.6	11.1	19.0	12
10771	do	do	do	(2)	189	.28	3.0	13.3	18.7	19
16032	Tompkins Cove	do	Argillaceous dolomite	(2)	173	.50	7.8	5.1	(2)	(2)
11504	Gouverneur	St. Lawrence	Marble	10,590	170	.29	(2)	(2)	10.3	2
10191	Hopkinson	do	Sandstone	35,240	157	2.02	2.8	14.3	18.0	12
11182	Collicoon	Sullivan	Feldspathic sandstone	22,620	166	1.04	3.0	13.3	14.7	13
11181	Tusten	do	do	26,300	171	.64	3.3	12.1	15.3	14
20820	Ontario	Wayne	Dolomite	(2)	176	.45	4.2	9.5	14.7	9
10909	Peekskill (near)	Westchester	Hypersthene syenite	(2)	179	.62	3.5	11.4	17.0	9
20171	Verplanck	do	Dolomitic marble	(2)	177	.26	5.6	7.1	13.0	4
20172	do	do	do	(2)	177	.21	5.1	7.8	13.0	5
20173	do	do	do	(2)	175	.28	4.2	9.5	12.0	4
11199	Yorktown	do	Granite	16,200	168	.77	5.8	6.9	18.0	5

[1] Exact locality not known.

[2] Test not made.

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922*—Continued.

NORTH CAROLINA.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
15877	Haw River	Alamance	Diabase	(2)	181	0.53	3.5	11.4	18.0	16
19788	Hiddenite	Alexander	Granite gneiss	(2)	164	.61	7.2	5.6	18.7	6
20189	Sparta	Alleghany	Biotite gneiss	(2)	171	.35	4.4	9.1	18.7	10
20196	(1)	do	Quartz	(2)	162	.61	12.8	3.1	17.7	3
17048	Jefferson	Ashe	Hornblende gneiss	(2)	185	.89	5.2	7.7	12.0	6
10193	Cranberry	Avery	do	(2)	208	.70	4.3	9.3	(2)	(2)
10194	do	do	do	(2)	192	.48	5.5	7.3	(2)	(2)
9858	Asheville	Buncombe	Biotite gneiss	(2)	168	.26	4.4	9.1	19.3	7
10972	do	do	do	(2)	168	1.35	2.7	14.8	18.0	10
17869	do	do	Granite	(2)	165	.56	3.0	13.3	19.3	11
13901	Craggy	do	do	(2)	163	.49	2.8	14.3	18.5	12
10973	(1)	do	Biotite gneiss	(2)	172	.67	3.5	11.4	18.0	13
11344	Sunset Mountain	do	do	(2)	166	.33	4.1	9.8	17.3	7
11345	do	do	do	(2)	171	.25	3.5	11.4	16.7	10
16071	Granite Falls (near)	Caldwell	do	(2)	166	.76	3.1	12.9	16.7	11
20141	Pelham	Caswell	Granite gneiss	28,580	161	.59	2.9	13.8	18.3	8
16514	Stokesland	do	do	(2)	162	.76	3.7	10.8	(2)	12
17474	Stokesland (near)	do	do	(2)	162	.75	4.5	8.9	18.0	9
19789	Yanceyville (near)	do	Biotite gneiss	(2)	168	.62	6.4	6.2	18.3	8
18980	(1)	do	Sericite gneiss	(2)	162	.75	4.1	9.8	18.0	7
17466	(1)	Chatham	Altered andesite	(2)	180	.20	1.7	23.5	17.7	45
11507	Regal	Cherokee	Marble	(2)	169	.25	6.1	6.6	12.3	3
13027	New Bern	Craven	Shell limestone	(2)	(2)	(2)	49.0	.8	(2)	(2)
20046	Newsom	Davidson	Altered rhyolite	(2)	165	.10	2.8	14.3	18.7	32
14753	(1)	Durham	Gneissoid granite	(2)	165	.43	4.1	9.8	18.0	7
16896	Winston-Salem	Forsyth	Biotite gneiss	(2)	170	.43	4.3	9.3	16.7	8
12180	Belmont (near)	Gaston	Aplitic granite	(2)	173	.85	2.9	13.8	(2)	(2)
14403	do	do	Biotite granite	(2)	171	.39	3.5	11.4	17.8	8
15775	Greensboro	Guilford	Quartz and quartzite	(2)	164	.18	8.6	4.7	(2)	(2)
19979	Summerfield	do	Granite schist	(2)	167	.50	3.5	11.4	18.0	9
15878	(1)	do	Amphibolite	(2)	190	.42	2.8	14.3	18.7	18
16536	Littleton	Halifax	Hornblende quartzite	(2)	170	.33	2.7	14.6	(2)	17
20045	do	do	Hornblende gneiss	(2)	169	.50	2.8	14.3	18.7	11
12770	Canton (near)	Haywood	Granite gneiss	(2)	157	1.16	20.3	2.0	17.3	6
11751	Waynesville	do	Biotite gneiss	(2)	173	.76	5.7	7.0	18.0	5
17480	Hendersonville	Henderson	Gneissoid granite	(2)	(2)	(2)	3.4	11.8	(2)	(2)
19653	Statesville	Iredell	Biotite gneiss	20,235	163	.59	6.0	6.7	17.3	7

13050	Dover (near)	Jones	Fossiliferous limestone	(2)	150	3.85	10.6	3.8	(2)	(2)	
12883	Pollocksville	do	Shell limestone	(2)	(2)	(2)	16.9	2.4	(2)	(2)	
20043	Osgood	Lee	Siliceous slate	(2)	174	.34	2.8	14.3	13.7		11
19986	Sanford	do	Altered basalt	(2)	180	.26	2.9	13.8	17.0		23
18044	Buguo	Madison	Dolomite	(2)	181	.25	3.5	11.4	15.0		11
11397	Ashford	MacDowell	Dolomitic marble	(2)	178	.41	4.5	8.9	16.0		8
20150	Old Fort	do	Altered granite porphyry	(2)	169	.44	4.3	9.3	18.3		9
14514	(1)	Mecklenburg	Weathered granite	(2)	163	.37	4.5	8.9	18.0		8
14515	(1)	do	Quartzite	(2)	166	.54	2.3	17.4	(2)	(2)	
14516	(1)	do	Uralite diabase	(2)	182	.80	2.9	13.8	18.7		14
15285	(1)	do	Altered biotite granite	(2)	134	.65	3.7	10.8	18.3		26
16869	(1)	Mitchell	Granite gneiss	(2)	168	.37	3.7	10.8	18.3		9
17485	Swift Island Ferry	Montgomery	Amphibolite	(2)	185	.98	3.8	10.5	18.0		17
12888	Castle Hayne	New Hanover	Limestone	(2)	152	4.88	9.8	4.1	12.7		5
19419	Franklinville	Randolph	Altered rhyolite tuff	(2)	171	.27	2.6	15.4	18.3		18
19909	do	do	Fragmental rhyolite	(2)	171	.15	2.8	14.3	18.7		24
19980	Ashboro	do	Hornblende epidosite	(2)	191	.47	2.2	18.2	18.0		14
20527	Stacey	Rockingham	Granite	39,170	163	.61	3.4	11.8	18.7		10
20528	do	do	do	41,410	165	.29	2.9	13.8	18.3		9
9892	Granite Quarry	Rowan	do	21,125	162	.41	4.6	8.7	19.3		10
10306	Granite Quarry (near)	do	do	34,860	164	.22	2.0	20.0	18.7		11
15009	Granite Quarry	do	do	(2)	163	.57	3.5	11.4	18.0		15
11415	Salisbury	do	do	28,340	(2)	(2)	(2)	(2)	19.3		7
13972	do	do	Gneissoid granite	(2)	(2)	(2)	3.3	12.1	19.0		10
10412	(1)	do	Granite	20,930	164	.51	2.8	14.3	19.3		9
10413	(1)	do	do	23,580	162	.43	3.3	12.1	19.0		7
10770	(1)	do	do	17,800	164	.43	5.2	7.7	19.3		10
11200	(1)	do	do	26,400	162	.44	2.2	18.2	18.7		9
20119	(1)	do	do	37,820	163	.55	3.3	12.1	18.0		11
11706	Harris (near)	Rutherford	Biotite gneiss	12,290	166	.61	7.1	5.6	16.3		6
12116	Harris	do	Biotite granite	13,680	166	.56	5.1	7.8	17.3		4
11420	Mount Airy	Surry	Granite	23,990	(2)	(2)	(2)	(2)	18.7		6
13527	do	do	do	(2)	162	.61	5.4	7.4	(2)		11
14891	do	do	do	(2)	164	.71	4.6	8.7	18.0		6
20120	do	do	do	26,375	162	.79	5.0	8.0	18.3		7
20892	Penrose	Transylvania	Biotite gneiss	(2)	165	.59	4.1	9.8	18.7		8
19024	(1)	do	do	(2)	169	1.31	7.0	5.7	14.0		4
19025	(1)	do	do	(2)	166	.55	4.2	9.5	17.7		8
19026	(1)	do	do	(2)	165	.65	4.2	9.5	18.3		9
19027	(1)	do	do	(2)	166	.52	4.9	8.2	17.7		7
15442	Monroe	Union	Siliceous slate	(2)	173	.60	3.0	13.3	12.3		10
15078	Graystone	Vance	Gneissoid granite	35,140	163	.72	3.6	11.1	18.0		7
15474	do	do	do	(2)	167	.51	4.0	10.0	17.7		6
15079	do	do	do	31,050	162	.79	3.4	11.8	18.0		7
14244	Henderson (near)	do	do	(2)	170	.45	2.8	14.3	18.0		6
19787	Cary	Wake	Biotite granite	(2)	165	.56	4.9	8.2	18.0		8
14175	Raleigh (near)	do	do	(2)	163	.47	3.2	12.5	(2)	(2)	
15012	do	do	Olivine diabase	(2)	186	.38	1.7	23.5	18.0		19
16004	Raleigh	do	Hornblende granite	(2)	168	.65	4.9	8.2	18.7		9

[1] Exact locality not known.

[2] Test not made.

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922*—Continued.

NORTH CAROLINA—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
19654	Rollsville	Wake	Biotite granite	21,790	167	.53	7.0	5.7	18.0	7
11402	Wendell	do	do	(2)	164	1.04	4.3	9.3	17.3	4
14174	do	do	do	(2)	(2)	(2)	(2)	(2)	18.0	5
16256	Manson	Warren	Gneissoid granite	(2)	164	.76	4.2	9.5	17.0	6
11566	Neversom	Wilson	Granite	21,920	165	.34	5.4	7.4	18.7	9
19405	Bald Mountain	Yancey	Altered rhyolite	(2)	168	.02	2.9	13.8	19.2	28
19406	do	do	do	60,725	166	.12	3.0	13.3	18.3	15
			OHIO.							
16722	Liberty Township	Adams	Limestone	(2)	173	0.60	5.5	7.3	11.0	5
14016	Delphos	Allen	Argillaceous dolomite	(2)	169	.20	4.8	8.3	16.2	6
14018	do	do	Dolomite	(2)	174	1.04	5.1	7.8	15.3	9
14019	do	do	do	(2)	171	.89	4.4	9.1	14.7	9
14772	do	do	Argillaceous dolomite	(2)	170	.70	4.8	8.3	15.3	13
9864	Lima	do	Dolomite	(2)	165	2.67	3.2	12.5	14.7	7
10025	do	do	Argillaceous limestone	(2)	168	2.77	3.5	11.4	14.7	12
10026	do	do	do	(2)	168	1.96	3.7	10.8	16.0	11
10027	do	do	do	(2)	168	2.26	3.6	11.1	15.0	11
10305	do	do	Limestone	(2)	169	1.80	4.2	9.5	16.0	6
15216	do	do	Argillaceous dolomite	(2)	166	1.86	3.7	10.8	14.7	9
20055	Somerset	Belmont	Sandstone	(2)	142	1.84	6.2	6.5	14.7	7
19379	Union Township	do	do	(2)	135	7.48	26.6	1.5	.0	2
20449	do	do	do	(2)	136	7.14	24.2	1.7	.0	2
20054	Warren	do	Feldspathic sandstone	(2)	141	6.28	24.6	1.6	44.0	4
9953	Middletown	Butler	Basic open-hearth slag	(2)	209	2.33	4.1	9.8	(2)	(2)
9954	do	do	do	(2)	190	2.74	20.4	1.7	(2)	(2)
19625	Lewis	Brown	Limestone	(2)	169	.20	6.9	5.8	12.7	6
20099	Perry	do	Argillaceous limestone	(2)	169	.63	7.2	5.6	10.7	7
20921	do	do	do	(2)	166	2.06	6.4	6.3	11.7	6
20922	Sterling	do	do	(2)	150	2.19	4.3	9.3	11.3	5
16660	Springfield	Clark	Micaceous sandstone	(2)	141	7.30	19.6	2.0	(2)	3
17062	Miamiville	Clermont	Limestone	18,575	171	.17	5.5	7.3	13.0	5
19140	Stonelick	do	do	(2)	171	.58	5.3	7.6	11.3	6
16728	(1)	do	do	(2)	168	.78	10.0	4.0	11.7	6
20129	(1)	do	do	(2)	169	.47	6.6	6.1	13.3	6
10516	Farmer	Clinton	do	(2)	171	1.66	5.2	7.6	13.2	4

10517	do	do	Siliceous limestone	(2)	167	.49	6.6	6.1	13.7	5
14524	Richland	do	Argillaceous dolomite	(2)	157	3.48	9.4	4.3	13.3	5
15096	Leetonia	Columbiana	Blast-furnace slag	(2)	111	8.42	16.2	2.5	(2)	(2)
12890	Berea	Cuyahoga	Sandstone	(2)	124	7.41	(2)	(2)	.7	5
18718	Cleveland	do	Slag	(2)	141	4.09	15.6	2.6	(2)	(2)
18730	do	do	do	(2)	136	5.12	21.0	1.9	(2)	(2)
12891	Euclid	do	Sandstone	(2)	139	6.55	(2)	(2)	2.7	9
15464	(1)	Defiance	Shale	(2)	157	.45	10.0	4.0	(2)	6
15215	Delaware	Delaware	Argillaceous limestone	(2)	163	4.93	5.3	7.6	15.8	8
20394	Troy	do	do	(2)	168	1.52	3.5	11.4	15.0	9
11331	Sandusky	Erie	do	14,615	167	1.38	3.0	13.3	12.9	9
13073	do	do	Limestone	(2)	169	1.07	4.8	8.3	15.9	10
13074	do	do	do	(2)	166	1.56	4.7	8.5	12.4	8
19783	do	do	Argillaceous limestone	(2)	167	.70	3.9	10.3	13.3	6
16347	Columbus	Franklin	Blast-furnace slag	(2)	139	5.44	12.1	3.3	(2)	4
17079	do	do	Limestone	(2)	165	1.44	4.0	10.0	14.7	6
16340	do	do	Argillaceous limestone	(2)	167	1.39	4.3	9.3	(2)	7
16418	do	do	do	(2)	162	1.14	5.4	7.4	(2)	(2)
10536	Marble Cliff	do	do	(2)	(2)	(2)	(2)	(2)	15.2	6
15888	do	do	do	25,900	166	1.52	4.7	8.5	15.3	7
17411	do	do	Limestone	(2)	166	1.50	4.5	8.9	(2)	(2)
19327	Springfield	Gallia	Sandstone	(2)	142	7.18	23.7	1.7	.0	3
11329	Dunkirk	Hardin	Argillaceous dolomite	26,295	167	2.17	3.4	11.8	15.0	10
11202	Kenton	do	Dolomite	(2)	167	2.08	2.7	14.8	15.3	15
11225	do	do	do	(2)	164	2.35	2.5	16.0	17.0	10
16417	do	do	do	(2)	168	2.12	2.9	13.9	(2)	(2)
20519	Fairfield	Highland	do	(2)	166	2.35	13.5	3.0	14.0	(2)
20520	do	do	do	(2)	154	4.45	14.2	2.8	19.3	5
2521	do	do	do	(2)	160	2.86	7.1	5.6	12.7	6
14525	Homar	do	Argillaceous dolomite	(2)	169	1.35	7.4	5.4	12.7	5
19141	Paint	do	Dolomite	(2)	161	2.92	12.5	3.2	12.7	6
19142	do	do	do	(2)	160	3.90	11.6	3.4	12.7	10
19730	do	do	do	(2)	165	1.78	6.5	6.2	13.3	7
16939	(1)	do	Argillaceous dolomite	(2)	163	3.91	5.3	7.5	3.7	5
19929	Salt Creek Township	Holmes	do	(2)	164	1.00	6.9	5.8	13.7	6
11198	Bellevue	Huron	Dolomite	(2)	156	4.89	4.9	8.2	6.0	5
13095	do	do	Limestone	(2)	157	5.85	6.3	6.3	10.3	5
11203	Clarksfield	do	Feldspathic sandstone	7,910	136	7.75	7.5	5.3	(2)	5
18717	Jackson	Jackson	Slag	(2)	176	.39	4.5	8.9	(2)	(2)
20566	do	do	Blast furnace slag	(2)	156	2.78	10.3	3.9	(2)	(2)
20348	Island Creek	Jefferson	Sandstone	(2)	146	4.30	18.2	2.2	15.3	4
9854	Ironton	Lawrence	Blast furnace slag	(2)	181	1.73	5.8	6.9	16.0	6
15996	do	do	do	(2)	148	4.08	7.2	5.6	18.0	9
15997	do	do	do	(2)	153	3.47	7.1	5.6	(2)	(2)
18728	do	do	Slag	(2)	136	3.97	8.6	4.7	(2)	(2)
14833	Lorain	Lorain	Blast furnace slag	(2)	123	5.89	16.8	2.4	(2)	(2)
18731	do	do	Slag	(2)	123	5.71	24.3	1.6	(2)	(2)
13093	Toledo	Lucas	Dolomite	(2)	172	.49	6.1	6.6	12.7	6
18865	do	do	Slag	(2)	135	3.51	15.7	2.5	(2)	(2)
9890	Waterville	do	Argillaceous dolomite	(2)	168	2.36	3.3	12.1	16.3	11
9983	do	do	Dolomite	(2)	168	2.04	2.8	14.3	16.3	14

[1] Exact locality not known.

[2] Test not made.

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922*—Continued.

OHIO—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
13179	Waterville	Lucas	Slate	(2)	171	.40	8.6	4.6	16.0	14
13397	do	do	Limestone	(2)	165	.23	4.0	10.0	16.0	19
16747	do	do	Magnesium limestone	(2)	163	2.07	6.9	5.8	4.3	5
11097	Whitehouse	do	Siliceous limestone	(2)	161	2.90	6.2	6.5	9.3	6
19289	do	do	Argillaceous limestone	(2)	160	3.49	6.1	6.6	7.0	6
18737	Brier Hill	Mahoning	Slag	(2)	135	5.16	19.5	2.1	(2)	(2)
16290	Youngstown	do	Blast furnace slag	(2)	201	3.07	12.8	3.1	(2)	(2)
17504	do	do	do	(2)	(2)	(2)	20.1	2.0	(2)	(2)
17505	do	do	do	(2)	(2)	(2)	26.0	1.6	(2)	(2)
10537	Pigua	Miami	Dolomite	9,810	156	2.53	10.3	3.9	11.0	4
10538	do	do	do	15,150	178	.97	4.8	8.3	15.0	13
10535	Centerville	Montgomery	Argillaceous limestone	(2)	(2)	(2)	(2)	(2)	10.9	3
19350	Deerfield	Morgan	Sandstone	(2)	138	8.54	16.7	2.4	.0	3
19352	do	do	Argillaceous limestone	(2)	168	.74	6.2	6.5	13.3	6
16922	Malta	do	Limestone	(2)	168	.26	6.5	6.2	12.7	6
17389	do	do	Argillaceous limestone	(2)	164	1.32	4.7	8.5	15.3	7
19351	do	do	do	(2)	162	1.64	5.9	6.8	14.7	8
16171	do	do	Feldspathic sandstone	(2)	143	6.78	7.7	5.2	.0	4
16173	do	do	do	(2)	138	7.61	10.5	3.8	.0	4
19377	Stock	Noble	Ferruginous sandstone	(2)	142	6.92	11.9	3.4	.0	4
19378	do	do	Argillaceous limestone	(2)	168	.23	6.0	6.7	16.0	7
19793	Allen	Ottawa	Dolomite	(2)	162	3.15	9.4	4.3	13.3	5
9973	Limestone	do	do	(2)	162	(2)	5.5	7.3	12.0	7
9945	Rocky Ridge	do	do	13,360	175	.41	5.4	7.4	12.0	9
19452	Thorn Township	Perry	Chert	(2)	152	1.95	7.4	5.4	(2)	(2)
15217	Circleville	Pickaway	Dolomitic marble	(2)	164	2.82	4.4	9.1	14.7	9
10539	New Paris	Preble	Dolomite	16,480	167	1.12	3.4	11.8	16.7	6
12358	Woodville	Sandusky	do	(2)	160	4.14	7.5	5.3	17.0	7
13888	do	do	do	(2)	159	3.85	5.8	6.9	16.0	7
16547	do	do	do	(2)	162	3.53	5.8	6.9	(2)	(2)
19781	Bascom	Seneca	do	(2)	161	3.71	7.9	5.1	8.7	4
11330	Bloomville	do	Argillaceous limestone	16,565	166	2.22	3.6	11.1	12.5	6
19331	Clinton Township	do	Dolomite	(2)	160	3.90	5.4	7.4	12.7	7
19782	Liberty	do	do	(2)	165	2.72	7.5	5.3	11.0	7
18732	Hubbard	Trumbull	Slag	(2)	137	5.63	13.0	3.1	(2)	(2)
18734	MacDonald	do	do	(2)	125	5.80	15.4	2.6	(2)	(2)
20578	Dover	Tuscarawas	Blast furnace slag	(2)	120	7.67	18.0	2.2	12.7	5
11328	Middlepoint	Van Wert	Argillaceous limestone	27,570	169	1.76	3.8	10.5	15.6	10

14771	do	do	Dolomite	(2)	166	2.07	5.0	8.0	15.7	8
9947	Bowling Green	Wood	do	(2)	165	1.38	7.5	5.3	12.2	6
10346	Luckey	do	do	(2)	162	3.68	7.3	5.5	12.0	6
9883	North Baltimore	do	Argillaceous dolomite	(2)	168	2.61	5.0	8.0	16.0	10
9957	do	do	Dolomite	(2)	168	2.08	4.0	10.0	14.3	14
15047	do	do	Argillaceous dolomite	(2)	168	2.57	4.6	8.7	(2)	(2)
19446	(1)	(1)	Feldspathic sandstone	(2)	156	2.80	4.3	9.3	14.7	8
OKLAHOMA.										
19366	Springtown	Atoka	Chert	(2)	158	1.75	4.6	8.7	15.7	9
19367	do	do	do	(2)	161	.82	4.0	10.0	19.3	16
14997	Armstrong (near)	Bryan	Fossiliferous limestone	(2)	164	1.49	6.3	6.4	13.3	6
16134	Armstrong (near)	do	Limestone	(2)	166	1.46	4.9	8.2	15.7	6
15118	Caddo (near)	do	do	(2)	153	5.08	6.4	6.3	.0	5
16170	Caddo	do	Argillaceous sandstone	(2)	158	3.69	6.1	6.6	14.7	6
16136	Durant	do	Calcareous sandstone	(2)	154	5.32	6.8	5.9	11.3	7
16135	Durant (near)	do	Fossiliferous limestone	(2)	167	1.20	4.9	8.2	14.7	7
19348	Troy	Johnston	Diabase	(2)	189	.09	4.0	10.0	18.7	20
19349	do	do	Granite	(2)	163	.57	10.3	3.9	18.0	6
20583	Bromide	do	Limestone	(2)	163	1.94	5.9	6.8	15.3	8
17738	(1)	Kay	Argillaceous limestone	(2)	145	6.28	8.2	4.9	12.0	4
17057	Gowen	Latimer	Sandstone	(2)	143	5.02	15.8	2.5	(2)	(2)
18228	Salina	Mayes	Chert	(2)	(2)	(2)	4.3	9.3	(2)	(2)
18229	do	do	do	(2)	(2)	(2)	4.8	8.3	(2)	(2)
18230	do	do	Limestone	(2)	(2)	(2)	5.7	7.0	(2)	(2)
19098	Okmulgee	Okmulgee	Ferruginous sandstone	(2)	102	5.61	15.6	2.6	.7	4
15957	Hartshorne	Pittsburg	Limestone	(2)	168	.49	4.1	9.8	15.7	5
17875	do	do	do	(2)	163	1.32	3.8	10.5	(2)	(2)
15510	Barnett	Tulsa	do	(2)	(2)	(2)	4.2	9.5	(2)	(2)
15790	Lost City	do	do	(2)	163	3.03	5.7	7.0	(2)	(2)
15791	do	do	do	(2)	161	2.50	7.4	5.4	13.3	4
16586	Sands Springs	do	do	(2)	159	2.63	8.2	4.9	11.0	5
16826	do	do	do	(2)	166	.66	5.1	7.8	12.3	7
16825	do	do	do	(2)	163	1.59	6.0	6.7	12.0	6
15788	Tulsa	do	do	(2)	161	1.93	5.8	6.9	13.0	5
15789	do	do	do	(2)	164	1.07	5.7	7.0	12.7	5
14914	(1)	do	Argillaceous limestone	(2)	165	1.16	7.1	5.6	14.7	6
11640	Dewey	Washington	do	(2)	166	1.10	5.3	7.6	14.0	5
11641	do	do	do	(2)	164	1.14	5.3	7.6	11.3	5
16060	(1)	(1)	do	(2)	159	1.88	1.7	23.5	18.3	12
16062	(1)	(1)	do	(2)	155	2.28	4.9	8.2	(2)	(2)
16050	(1)	(1)	do	(2)	156	1.72	2.3	17.4	18.3	13
OREGON.										
18224	La Grande (near)	Baker	Basalt	(2)	174	1.62	3.4	11.8	18.7	18
18222	Nelsons	Malheur	Marble	(2)	166	.69	5.9	6.8	16.7	7

[1] Exact locality not known.

[2] Test not made.

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922*—Continued.

PENNSYLVANIA.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
9786	Granite	Adams	Gabbroitic diabase	23,435	(2)	(2)	(2)	(2)	15.2	14
16012	York Springs	do	Diabase	(2)	189	0.53	1.8	22.2	18.7	34
14382	Carnegie	Allegheny	Lead slag	(2)	238	.38	4.3	9.3	17.3	14
18729	Duquesne	do	Slag	(2)	140	3.78	13.7	2.9	(2)	(2)
16077	Parkers Landing	Armstrong	Limestone	19,470	161	.88	4.2	9.5	15.3	6
10104	Birdsboro (near)	Berks	Diabase	(2)	(2)	(2)	1.7	23.5	18.7	13
14468	Birdsboro	do	do	(2)	188	.35	(2)	(2)	18.7	10
18863	do	do	Slag	(2)	141	3.24	9.5	4.2	(2)	(2)
14642	Douglas Township	do	Altered slate	(2)	170	.32	1.9	21.1	18.7	28
18862	Temple	do	Slag	(2)	114	8.08	18.8	2.1	(2)	(2)
18221	Tuckertown (near)	do	Siliceous limestone	(2)	170	.12	3.7	10.8	15.7	10
11733	Yardley (near)	do	Granite gneiss	16,330	165	.21	4.0	10.0	18.3	15
13129	Tyrone	Blair	Sandstone	(2)	160	.13	3.3	12.1	18.7	12
15989	do	do	Chert	(2)	(2)	(2)	3.0	13.3	(2)	(2)
15987	Rock Hill	Bucks	Hypersthene diabase	(2)	(2)	(2)	2.3	17.4	(2)	(2)
11409	Quakertown	do	Diabase	34,040	(2)	(2)	(2)	(2)	18.0	10
12166	do	do	Hypersthene diabase	(2)	191	.17	2.8	14.3	18.3	25
14150	Johnstown	Cambria	Open-hearth slag	(2)	186	2.02	11.0	3.6	(2)	(2)
14151	do	do	Slag	(2)	128	6.88	18.9	2.1	(2)	(2)
12908	(1)	do	Sandstone	(2)	152	1.48	7.4	5.4	15.3	9
13174	(1)	do	do	(2)	153	.27	6.7	6.0	18.3	8
13178	(1)	do	do	(2)	152	.27	8.2	4.9	16.7	7
12477	Lehigh Gap	Carbon	Quartzite	(2)	165	.42	3.3	12.1	18.7	17
12478	do	do	Feldspathic quartzite	(2)	178	.35	2.8	14.3	18.7	16
14111	Palmerton	do	Spigel slag	(2)	123	7.52	13.1	3.1	(2)	(2)
11261	Summithill	do	Feldspathic sandstone	15,090	163	.83	4.7	8.5	18.0	10
14943	Devault	Chester	Dolomitic marble	(2)	176	.70	7.7	5.2	14.0	5
19087	do	do	Dolomite	(2)	177	.51	4.0	10.0	14.0	8
14294	Howellville	do	Marble	(2)	173	.36	4.3	9.3	(2)	(2)
17919	do	do	do	(2)	175	.31	4.6	8.7	14.0	5
12767	Berwick	Columbia	Sandstone	(2)	164	.35	4.8	8.3	18.7	14
12181	Catawissa	do	Feldspathic sandstone	(2)	167	.38	2.8	14.3	19.3	17
12186	do	do	do	(2)	166	.41	3.2	12.5	19.3	25
12361	Conewago	Dauphin	Diabase	(2)	188	.35	2.8	14.3	18.0	20
10357	(1)	Delaware	Biotite gneiss	(2)	(2)	(2)	(2)	(2)	18.0	9
18866	Erie	Erie	Slag	(2)	135	2.35	16.5	2.4	(2)	(2)
9773	Connellsville	Fayette	Siliceous limestone	(2)	168	.46	2.8	14.3	17.7	13
18727	Dunbar	do	Slag	(2)	129	6.33	14.5	2.8	(2)	(2)
13933	Point Marion	do	Feldspathic sandstone	(2)	151	3.53	10.3	3.9	11.0	6

15199	Fayetteville	Franklin	Quartzite	(2)	158	.85	4.9	8.2	19.0	11
12379	Union Furnace	Huntington	Marble	(2)	173	.33	3.9	10.3	15.7	7
15440	Donaghmore	Lebanon	Blast-furnace slag	(2)	123	8.50	8.8	4.5	(2)	(2)
14999	Emaus	Lehigh	Altered diorite	(2)	175	.77	5.8	6.9	(2)	7
18740	do	do	Slag	(2)	134	5.65	13.1	3.1	(2)	(2)
15441	Hockendauqua	do	Blast-furnace slag	(2)	130	7.70	17.1	2.3	12.3	3
18867	do	do	Slag	(2)	121	5.10	19.5	2.1	(2)	(2)
15351	(1)	do	Diorite	(2)	184	.91	5.0	8.0	18.0	10
11255	Duryea	Luzerne	Calcareous sandstone	(2)	167	.41	3.4	11.8	16.7	13
11352	White Haven	do	Feldspathic quartzite	36,000	(2)	(2)	(2)	(2)	(2)	19
18104	do	do	Sandstone	(2)	169	.17	2.6	15.4	18.3	16
10672	Jersey Shore	Lycoming	Siliceous limestone	20,360	166	.44	2.6	15.4	18.2	9
19239	Lime Bluff	do	Argillaceous limestone	21,160	168	.27	7.3	5.5	14.7	8
10518	Montoursville	do	do	23,460	168	.10	6.6	6.1	16.2	6
12929	Montoursville (near)	do	Limestone	(2)	169	.18	7.5	5.3	15.3	5
12261	Green Lane	Montgomery	Altered slate	(2)	169	.30	2.3	17.4	17.3	24
16587	do	do	Siliceous slate	(2)	172	.38	4.2	9.5	18.0	10
13939	Ivy Rock	do	Dolomitic marble	(2)	177	.26	4.9	8.2	15.3	7
17921	Lafayette	do	Granite	(2)	168	.54	3.2	12.5	19.0	11
18735	Pottstown	do	Slag	(2)	133	4.83	14.4	2.8	(2)	(2)
12688	Bethlehem (near)	Northampton	Dolomite	38,949	174	.04	4.9	8.1	15.0	10
12690	Bethlehem	do	Limestone	18,990	171	.14	5.2	7.7	14.7	7
12691	do	do	do	21,440	167	.28	6.2	6.5	11.8	8
15439	do	do	Blast furnace slag	(2)	139	5.19	20.2	2.0	12.3	3
18736	do	do	Slag	(2)	129	6.15	11.9	3.4	(2)	(2)
15264	Glendon	do	do	(2)	174	1.98	6.1	6.6	15.7	8
10137	South Bethlehem	do	Blast-furnace slag	(2)	145	4.42	9.3	4.3	13.7	3
12234	Dalmatia (near)	Northumberland	Feldspathic sandstone	(2)	166	.43	2.4	16.7	19.5	(2)
10429	Mount Carmel	do	Quartzite	(2)	163	.53	3.3	12.1	19.0	13
9812	Holmesburg	Philadelphia	Biotite gneiss	21,530	165	.58	(2)	(2)	19.0	7
11410	do	do	do	25,930	(2)	(2)	(2)	(2)	18.7	7
13907	do	do	Granite	(2)	(2)	(2)	4.9	8.2	18.7	8
14785	Matamoras	Pike	Feldspathic sandstone	(2)	165	1.04	5.0	8.0	15.0	10
11190	Shohola	do	do	25,250	170	.63	3.2	12.5	16.7	12
10345	Confluence	Somerset	Calcareous sandstone	24,790	158	.34	3.6	11.1	16.7	7
14691	(1)	(1)	Siliceous limestone	(2)	169	.35	2.3	17.4	17.7	19

RHODE ISLAND.

19418	Cranston	Providence	Granite gneiss	(2)	167	0.37	3.1	12.9	18.7	10
10248	East Providence	do	Feldspathic sandstone	(2)	168	.59	3.6	11.1	18.0	12
10171	Lincoln	do	Granite gneiss	(2)	170	.17	3.9	10.3	18.7	12
10467	Westerly	Washington	Granite	(2)	161	.37	3.9	10.3	18.7	9
11398	do	do	Biotite granite	31,450	162	.37	2.4	16.7	19.3	11
12445	do	do	Granite	18,260	162	.56	(2)	(2)	18.7	15

[1] Exact locality not known.

[2] Tests not made.

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922*—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
SOUTH CAROLINA.										
15453	Trenton	Edgefield	Biotite granite	(2)	164	0.74	3.2	12.5	(2)	(2)
10531	Rion	Fairfield	do	25,540	165	.59	4.4	9.1	18.3	8
14765	Rion (near)	do	do	20,100	164	.69	3.5	11.4	18.0	12
11417	Winsboro	do	do	22,970	(2)	(2)	(2)	(2)	18.0	7
10129	Greenville	Greenville	Hornblende gneiss	(2)	172	.68	8.0	5.0	17.0	6
10131	Greenville (17 miles from)	do	Granite	(2)	165	.82	4.4	9.1	18.7	8
20015	Travelers Rest	do	do	(2)	167	.91	9.1	4.4	17.7	6
20188	do	do	do	(2)	(2)	(2)	4.1	9.8	(2)	(2)
20321	do	do	Granite	(2)	164	.52	4.8	8.3	17.7	5
14457	Cayce	Lexington	Biotite granite	33,090	163	.51	2.5	16.0	18.3	13
19652	Leesville	do	Granite gneiss	37,690	166	.35	3.1	12.9	18.7	13
14298	McCormick (4 miles east)	McCormick	Altered andesite	(2)	171	2.82	10.6	3.8	16.7	8
14301	McCormick (near)	do	Quartz	(2)	163	.34	9.8	4.1	(2)	(2)
10130	Beverly	Pickens	Biotite gneiss	(2)	166	.75	4.1	9.8	17.7	4
11647	Columbia (near)	Richland	Granite	21,500	165	.99	3.1	12.9	18.0	8
19682	Columbia	do	Quartz	(2)	165	.18	6.4	6.3	18.7	(2)
12380	Spartanburg	Spartanburg	Biotite granite	(2)	165	.57	6.8	5.9	18.5	6
15153	Lockhart	Union	Diorite	(2)	189	.64	2.4	16.7	19.0	10
12863	Rock Hill	York	Altered gabbro	(2)	188	.10	3.2	12.5	18.0	17
SOUTH DAKOTA.										
19068	Bijou Hills	Brule	Opaline sandstone	(2)	144	1.76	(2)	(2)	18.0	10
17874	(1)	Gregory	Calcareous sandstone	(2)	140	3.92	7.4	5.4	17.7	9
17872	Gregory	do	Tuffaceous limestone	(2)	144	5.66	14.2	2.8	6.7	6
18101	Piedmont (west of)	Meade	Dolomitic limestone	(2)	159	3.05	7.1	5.6	9.3	5
10108	Dell Rapids	Minnehaha	Quartzite	(2)	165	.41	2.8	14.3	19.3	17
18985	Dell Rapids	Minnehaha	Quartzite	(2)	166	0.07	2.5	16.0	18.7	20
19596	do	do	do	51,700	(2)	(2)	(2)	(2)	(2)	(2)
10894	Sioux Falls	do	do	(2)	163	.27	1.4	28.6	19.3	17
10895	do	do	Olivine diabase	(2)	190	.37	2.7	14.8	18.7	18
18984	do	do	Quartzite	36,280	170	.30	2.3	17.4	18.7	17
10896	Rowena	do	do	(2)	164	.28	2.7	14.8	19.3	17
13729	(1)	do	do	(2)	(2)	(2)	(2)	(2)	19.7	17
13730	(1)	do	do	(2)	(2)	(2)	(2)	(2)	19.7	30
16017	Colome (near)	Tripp	Sandstone	(2)	149	1.06	9.3	4.3	16.3	6
16018	do	do	do	(2)	148	1.52	8.6	4.7	(2)	(2)
16019	Colome	do	Siliceous limestone	(2)	144	4.19	24.8	1.6	5.3	5
16465	do	do	Tuffaceous limestone	(2)	138	6.12	10.9	3.7	(2)	7

[1] Exact locality not known.

[2] Test not made.

TENNESSEE.

9992	Maryville	Blount	Argillaceous limestone	(2)	168	0.40	3.8	10.5	16.7	6
9993	do	do	Limestone	(2)	168	.30	4.3	9.3	15.7	5
10326	Harrogate (near)	Claiborne	Dolomite	(2)	174	.92	3.2	12.5	16.0	14
10327	do	do	do	(2)	171	1.86	3.6	11.1	13.3	7
10292	New Tazewell	do	Siliceous limestone	(2)	171	1.84	4.2	9.5	13.3	8
10446	New Tazewell (near)	do	Dolomite	(2)	172	1.20	4.1	9.8	15.3	9
10581	do	do	Siliceous dolomite	(2)	170	1.93	4.1	9.8	15.2	9
10483	Jamestown	Fentress	Sandstone	(2)	145	3.97	10.8	3.7	15.0	4
12703	Chattanooga (near)	Hamilton	Limestone	(2)	168	.11	3.9	10.3	16.0	10
12740	do	do	Argillaceous limestone	(2)	168	.20	4.2	9.8	16.0	9
13064	Chattanooga	do	Limestone	(2)	169	.08	4.5	8.8	15.7	8
15986	Erin	Houston	Siliceous sinter	(2)	90	21.32	43.1	.9	(2)	(2)
11521	Asbury	Knox	Marble	16,030	169	.23	6.0	6.7	13.3	2
11519	Knoxville	do	do	(2)	169	.13	7.0	5.7	13.0	3
11520	do	do	do	(2)	168	.12	5.5	7.3	13.6	5
11522	do	do	do	9,230	168	.11	(2)	(2)	13.6	4
11523	do	do	do	(2)	168	.17	6.2	6.5	13.0	3
11524	do	do	do	29,000	168	.20	5.5	7.3	13.0	3
9887	Mascot	do	Dolomite	(2)	178	.20	4.1	9.8	16.0	11
16275	Iron City	Lawrence	Agrillaceous limestone	(2)	168	.47	5.0	8.0	15.0	8
11526	Amarco	Loudon	Marble	(2)	168	.25	6.1	6.6	12.6	3
10315	Madisonville	Monroe	Ferruginous sandstone	(2)	178	.41	4.0	10.0	17.3	8
10316	do	do	Siliceous limestone	(2)	169	.46	6.3	6.4	16.7	9
10317	do	do	Limestone	(2)	167	.77	8.3	4.8	16.7	9
10318	do	do	do	(2)	171	.33	4.2	9.5	17.3	8
10323	do	do	Crystalline limestone	(2)	168	.33	6.0	6.6	13.3	5
10414	(1)	do	Siliceous dolomite	(2)	174	1.36	3.3	12.1	15.7	18
17507	Clarksville	Montgomery	Limestone	(2)	158	2.05	4.9	8.2	9.7	5
19913	Livingston (near)	Overton	do	(2)	165	.64	5.9	6.8	12.9	5
9734	Byrdstown	Pickett	Argillaceous dolomite	(2)	168	2.65	4.3	9.3	13.2	12
9735	do	do	do	(2)	168	1.64	3.9	10.3	17.3	13
15897	Copperhill	Polk	Smelter slag	(2)	(2)	(2)	5.5	7.3	(2)	(2)
11525	Luttrell	Union	Marble	(2)	170	.17	6.9	5.8	12.3	5
14840	Brayesville	Washington	Limestone	(2)	170	.84	6.6	6.1	15.3	4
14464	Johnson City	do	Siliceous limestone	(2)	175	.29	2.5	16.0	17.3	16
14841	Washington College	do	Limestone	(2)	169	.49	5.7	7.0	15.3	5

TEXAS.

16633	Blanket	Brown	Argillaceous limestone	(2)	162	1.42	6.7	6.0	(2)	5
18686	New Braunfels	Comal	Limestone	(2)	160	2.44	5.5	7.3	11.3	6
20092	do	do	do	(2)	161	1.21	5.5	7.3	12.0	6
13980	El Paso	El Paso	Lead slag	(2)	222	1.60	7.1	5.6	(2)	(2)
15004	(1)	do	Smelter slag	(2)	224	.80	4.8	8.3	(2)	(2)
15005	(1)	do	Lead smelter slag	(2)	212	.65	9.8	4.1	(2)	(2)
17633	Fredericksburg	Gillespie	Limestone	(2)	(2)	(2)	6.9	5.8	(2)	(2)

[1] Exact locality not known.

[2] Test not made.

TABLE 1.—*Result of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922*—Continued.

TEXAS—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
10044	(1)	Grayson	Clay limestone	(2)	134	12.80	(2)	(2)	.0	2
12488	Longview	Gregg	Ferrugineous conglomerate	(2)	153	9.74	25.8	1.6	9.0	3
12489	do	do	Ferrugineous sandstone	(2)	178	4.89	13.7	2.9	13.5	6
12490	do	do	do	(2)	150	7.31	13.9	2.8	11.3	3
12491	Gladewater	do	do	(2)	143	9.06	16.6	2.4	3.8	4
16590	(1)	Harrison	do	(2)	165	4.72	21.3	1.9	(2)	11
16828	Groesbeck	Limestone	Siliceous limestone	(2)	158	1.32	6.0	6.7	14.0	8
17497	Llano	Llano	Rhyolite	(2)	164	.38	2.3	17.4	19.3	21
17442	Madisonville	Madison	Sandstone	(2)	135	6.62	5.8	6.9	13.0	9
11347	Bowie	Montague	Quartz conglomerate	(2)	148	4.34	21.6	1.9	(2)	(2)
19458	Mineral Wells	Palo Pinto	Argillaceous limestone	(2)	162	2.39	4.3	9.3	15.3	6
19397	Eldorado	Schelicher	do	(2)	147	5.11	12.4	3.2	13.3	5
19398	do	do	Limestone	(2)	150	5.62	7.9	5.1	.0	5
17080	Friendship	Smith	Ferrugineous sandstone	(2)	166	8.47	27.3	1.5	12.0	4
17074	Starville	do	do	(2)	177	.41	5.7	7.0	17.3	11
17020	San Angelo	Tom Green	Limestone conglomerate	(2)	165	1.21	5.6	7.1	17.6	5
17943	do	do	Dolomite	(2)	155	4.65	4.8	8.3	13.0	9
13106	Austin	Travis	Nephalite basalt	(2)	195	.06	2.8	14.3	18.7	29
11395	Chico	Wise	Limestone	(2)	169	.30	5.7	7.0	14.3	4
			UTAH.							
14250	Price	Carbon	Limestone	(2)	168	0.47	4.9	8.2	16.7	6
14251	Price (near)	do	Argillaceous limestone	(2)	166	.91	4.5	8.9	15.3	7
14257	Price	do	do	(2)	156	3.28	5.8	6.9	15.3	7
14258	do	do	Calcareous sandstone	(2)	161	2.15	6.3	6.4	14.7	8
14252	Castle Dale	Emery	Limestone conglomerate	(2)	154	3.95	17.3	2.3	(2)	(2)
14253	do	do	Argillaceous limestone	(2)	168	.48	4.7	8.5	16.0	6
14254	Castle Dale (near)	do	Calcareous sandstone	(2)	161	2.08	3.3	12.1	15.3	19
14249	Emery (near)	do	Limestone	(2)	162	2.16	7.1	5.6	16.0	12
14867	Poison Spring Bench	do	Argillaceous limestone	(2)	144	5.93	7.3	5.5	12.0	3
15261	do	do	do	(2)	139	4.66	8.4	4.8	10.7	5
14868	(1)	do	Limestone	(2)	166	.87	4.7	8.5	16.0	7
14255	(1)	do	Calcareous sandstone	(2)	166	1.79	7.6	5.3	14.7	7
13999	Garfield	Salt Lake	Copper slag	(2)	210	1.03	4.9	8.2	(2)	(2)
15107	do	do	do	(2)	202	.27	5.0	8.0	(2)	(2)
15109	do	do	do	(2)	208	1.37	6.6	6.0	18.0	18
14643	Midvale	do	Lead slag	(2)	221	.97	4.7	8.5	14.7	7

VERMONT.

12190	Hardwick	Caledonia	Biotite granite	(2)	165	1.11	(2)	(2)	17.0	8
10848	Burlington	Chittendon	Siliceous dolomite	(2)	163	.26	3.7	11.1	16.7	13
11503	do	do	Siliceous marble	40,700	177	.78	(2)	(2)	17.6	24
11191	Darby	Orleans	Siliceous limestone	(2)	171	.46	3.0	13.3	17.3	9
11488	Proctor	Rutland	Serpentine marble	16,050	171	.22	(2)	(2)	18.0	6
11489	do	do	Variegated marble	12,720	177	.17	(2)	(2)	16.7	16
11490	do	do	Black marble	18,755	171	.26	4.6	8.7	14.3	9
11491	do	do	Marble	11,045	170	.32	5.9	6.8	11.0	3
11492	do	do	do	7,750	167	.55	(2)	(2)	(2)	(2)
11493	do	do	do	6,945	168	.56	16.9	2.4	.0	2
11494	do	do	do	9,520	168	.31	7.2	5.6	11.0	2
11495	do	do	do	7,105	167	.41	9.3	4.3	7.7	2
11496	do	do	do	7,380	168	.39	10.6	3.8	6.7	3
11497	do	do	do	7,110	168	.46	(2)	(2)	4.0	3
11498	do	do	do	8,770	168	.52	6.4	6.3	8.7	3
11499	do	do	do	10,120	168	.32	7.8	5.1	11.7	3
11500	do	do	do	9,010	168	.28	7.8	5.1	9.0	3
11501	do	do	do	12,300	168	.36	4.8	8.3	11.7	4
11502	do	do	do	8,730	168	.41	7.3	5.5	7.0	3
11528	do	do	do	(2)	168	.45	(2)	(2)	7.3	4
9673	Barre	Washington	Biotite granite	(2)	165	.37	2.8	14.3	19.0	9
12209	do	do	do	(2)	165	.47	(2)	(2)	18.0	11
12200	Bethel	Windsor	Granite	(2)	164	.52	(2)	(2)	18.0	11

VIRGINIA.

10253	Charlottesville	Albemarle	Granite gneiss	(2)	171	0.75	5.4	7.4	17.3	5
12853	do	do	Mica schist	(2)	166	4.13	4.1	9.8	18.0	6
15887	Charlottesville (near)	do	Amphibolite	(2)	182	1.47	6.8	5.9	15.0	7
19332	Hatton	do	Altered diabase	(2)	187	.19	4.4	9.1	18.0	12
13299	Ivy	do	Amphibolite	(2)	194	.28	3.0	13.3	17.4	14
13712	do	do	Biotite gneiss	(2)	176	.86	4.6	8.7	18.0	8
20582	Mechums River	do	do	(2)	178	.46	4.7	8.5	17.0	8
14131	Mechums River (near)	do	do	(2)	177	.74	5.4	7.4	17.0	6
19161	Scottsville	do	Sericite schist	(2)	168	.77	17.5	2.3	(2)	(2)
20581	Woods Crossing	do	Biotite gneiss	(2)	178	.42	5.6	7.1	18.3	6
9926	(1)	do	do	(2)	181	.57	5.1	7.8	18.7	7
9927	(1)	do	Hornblende gneiss	(2)	193	.98	3.5	11.4	16.3	9
9928	(1)	do	Biotite gneiss	(2)	175	.62	5.3	7.5	17.6	7
11376	(1)	do	Sericite epidote schist	(2)	165	.69	5.0	8.0	18.3	7
11377	(1)	do	Biotite gneiss	(2)	173	1.21	5.4	7.4	18.7	3
13298	(1)	do	do	(2)	176	.77	6.2	6.5	16.7	7
16454	(1)	do	Gneiss	(2)	169	.77	5.8	6.9	(2)	12
20197	(1)	do	Granite gneiss	(2)	162	.61	3.5	11.4	18.3	11
10172	Clifton Forge	Alleghany	Siliceous limestone	(2)	166	.48	2.5	16.0	17.6	10

[1] Exact locality not known.

[2] Tests not made.

TABLE 1.—*Result of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922*—Continued.

VIRGINIA—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
17332	Long Dale	Alleghany	Slag	(2)	152	1.86	12.0	3.3	(2)	(2)
20890	do	do	Blast furnace slag	(2)	124	3.34	(2)	(2)	16.0	7
14870	Lynchburg	Amherst	Amphibolite	(2)	188	.81	5.3	7.6	16.7	7
20834	Falls Church (near)	Arlington	Muscovite granite	(2)	162	.55	2.7	14.8	18.7	10
20190	Basic City	Augusta	Slate	(2)	163	.37	6.4	6.3	17.0	11
20192	Craigsville	do	Siliceous limestone	(2)	172	.22	4.5	8.9	14.7	8
14881	Lone Fountain	do	Limestone	(2)	169	.22	5.8	6.9	16.0	4
16776	do	do	Argillaceous dolomite	(2)	174	.34	2.8	14.3	16.7	19
13499	Staunton	do	Limestone	(2)	175	.09	3.1	12.9	16.0	19
18942	do	do	Siliceous dolomite	(2)	176	.62	3.5	11.4	15.3	16
20858	do	do	Dolomite	(2)	175	.41	2.9	13.8	16.7	17
20859	do	do	do	(2)	175	1.05	3.5	11.4	17.7	12
20860	do	do	do	(2)	172	.81	2.9	13.8	15.7	8
20937	do	do	Limestone	(2)	168	.24	4.9	8.2	14.0	5
18978	West Virginia	do	Feldspathic quartzite	(2)	168	.35	3.4	11.8	16.3	18
18979	do	do	Sandstone	(2)	162	1.46	4.0	10.0	(2)	(2)
12915	(1)	do	Siliceous limestone	(2)	174	.31	3.5	11.4	16.3	15
12916	(1)	do	Feldspathic sandstone	(2)	163	1.25	3.5	11.4	16.0	11
12917	(1)	do	do	(2)	178	.45	3.1	13.0	16.0	24
12918	(1)	do	Sandstone	(2)	168	.34	3.1	12.9	18.0	6
15187	(1)	do	Limestone	(2)	169	.51	6.3	6.4	15.7	4
15188	(1)	do	do	(2)	168	.52	5.0	8.0	15.7	9
16641	(1)	do	do	(2)	172	.48	5.5	7.3	15.3	10
13990	Lynchburg (west of)	Bedford	Gabbro	(2)	175	0.31	4.9	8.2	18.7	7
14224	Major	do	Altered andesite	(2)	188	.43	2.7	14.8	17.3	9
16227	(1)	do	Hornblende gneiss	(2)	187	.73	10.0	4.0	16.7	4
16228	(1)	do	Hornblende schist	(2)	192	.82	5.6	7.2	16.0	14
16440	(1)	do	Amphibolite	(2)	187	.68	10.3	3.9	(2)	8
16686	(1)	do	Siliceous dolomite	(2)	176	.32	4.4	9.1	(2)	12
13906	Blue Ridge	Botetourt	do	(2)	174	.17	4.8	8.3	16.7	10
14449	do	do	Limestone	(2)	195	.17	6.2	6.5	15.0	5
19556	Bomack	do	Dolomite	(2)	177	.39	4.2	9.5	16.3	10
13724	Buchanan (near)	do	Argillaceous dolomite	(2)	173	.27	3.3	12.1	17.3	23
15111	do	do	Siliceous dolomite	(2)	176	.65	3.3	12.1	16.3	12
16648	Buchanan	do	Calcareous slate	(2)	170	.23	5.5	7.3	(2)	9
15452	Salt Petre Cave	do	Dolomite	(2)	178	.50	6.7	6.0	16.7	7
11565	Bocock	Campbell	Quartz	(2)	165	.33	15.0	2.7	(2)	(2)
14651	Bocock (near)	do	Sericite gneiss	(2)	165	.77	6.0	6.7	18.0	7
11779	Halsey (near)	do	Hornblende epidosite	(2)	198	.35	3.9	10.2	16.7	9
9891	Lone Jack Station	do	Quartzite schist	(2)	159	1.34	12.0	3.3	(2)	(2)

9904	do	do	Aplitic granite	20,200	165	.53	5.4	7.4	18.7	7
11551	do	do	Quartz	(2)	162	.71	10.9	3.7	(2)	(2)
10344	Lynchburg	do	Quartzite	25,885	160	1.20	4.3	9.3	18.6	14
11251	Lynchburg (near)	do	Quartz	(2)	165	.20	5.8	6.9	(2)	(2)
11362	Lynchburg	do	Hornblende gneiss	(2)	178	.80	10.3	3.9	19.3	8
12954	do	do	Biotite schist	(2)	166	1.60	6.8	5.9	16.0	6
16307	do	do	Dolomitic marble	(2)	172	.24	5.0	8.0	(2)	7
16783	do	do	Hornblende schist	(2)	186	.52	6.9	5.8	17.0	9
12834	(1)	do	do	(2)	184	.27	13.5	3.0	16.3	5
9819	Cliffview	Carroll	do	(2)	184	.71	4.4	9.1	18.3	14
9820	do	do	Altered hornblende gneiss	(2)	181	1.16	15.8	2.5	14.3	5
20097	Woodlawn	do	Mica gneiss	(2)	166	1.04	5.9	6.8	17.0	7
19198	(1)	do	Quartzite	(2)	165	.28	3.0	13.3	19.3	17
12984	(1)	Chesterfield	Biotite gneiss	(2)	163	.87	3.9	10.3	18.7	12
18106	Boyce	Clarke	Limestone	(2)	169	.13	15.7	2.5	(2)	(2)
13193	(1)	do	do	(2)	166	.05	6.4	6.3	15.0	7
10115	Boston	Culpepper	Altered rhyolite	(2)	168	.84	4.7	8.5	19.0	5
19358	do	do	Sericite gneiss	(2)	166	.36	5.4	7.4	17.3	8
19359	do	do	Feldspathic sandstone	(2)	165	.57	4.9	8.2	17.7	7
19361	do	do	Altered sandstone	(2)	167	.50	3.5	11.4	18.0	13
19365	do	do	Mica schist	(2)	168	.42	2.8	14.2	18.0	15
20077	do	do	Altered sandstone	(2)	162	.37	2.9	13.8	18.0	12
11394	Clintwood	Dickenson	Feldspathic sandstone	(2)	158	3.14	5.4	7.4	5.0	6
16190	do	do	Calcareous sandstone	(2)	158	2.47	5.0	8.0	17.3	7
16191	do	do	Feldspathic sandstone	(2)	158	3.03	8.2	4.9	11.3	6
19211	Hampton	Elizabeth City	Sandstone	(2)	155	.69	3.6	11.1	19.3	13
20907	Difficult Run	Fairfax	Muscovite gneiss	(2)	176	.66	5.4	7.4	15.7	9
20908	do	do	Sericite gneiss	(2)	169	1.15	4.0	10.0	18.3	17
17231	Fairfax	do	Amphibolite	(2)	174	1.32	9.1	4.4	6.3	6
17699	do	do	Talcose amphibolite	(2)	185	.72	4.1	9.8	14.0	7
17700	do	do	Amphibolite	(2)	187	.51	3.4	11.8	17.7	18
18409	do	do	Talc epidote schist	(2)	187	.60	4.2	9.5	16.0	7
19494	do	do	Actinolite epidote schist	(2)	182	1.22	6.0	6.7	13.7	5
19495	do	do	do	(2)	177	2.04	8.9	4.5	8.0	4
19496	do	do	do	(2)	180	1.74	6.5	6.2	(2)	(2)
19524	do	do	Talc chlorite schist	(2)	175	1.06	16.0	2.5	(2)	(2)
19616	do	do	Ferrugineous sandstone	(2)	143	6.30	12.4	3.2	.0	6
19617	do	do	Muscovite chlorite schist	(2)	138	1.23	12.9	3.1	6.3	6
19618	do	do	Amphibolite	(2)	184	2.92	13.1	3.0	12.0	5
19619	do	do	Talc amphibolite	(2)	185	1.22	10.2	3.9	.0	5
15011	Herndon	do	Rhyolite breccia	(2)	167	2.32	5.9	6.8	(2)	(2)
19724	do	Loudoun	Diabase	(2)	191	.41	3.8	10.5	17.7	11
20909	Spring Hill	Fairfax	Sericite gneiss	(2)	176	.43	6.1	6.6	15.3	9
20906	Swinks Mill	do	Amphibolite	(2)	192	.33	2.5	16.0	18.3	12
16729	(1)	do	Mica gneiss	(2)	172	1.85	9.8	4.1	(2)	6
19995	(1)	do	Amphibolite	(2)	197	.26	2.8	14.3	18.7	15
15382	Marshall	Faquier	Altered granite	(2)	162	2.16	6.6	6.1	18.0	8
16030	do	do	do	(2)	164	.65	3.8	10.5	18.7	10
16226	Midland (near)	do	Altered basalt	(2)	175	.81	3.0	13.3	17.3	7
13195	The Plains	do	Epidosite	(2)	188	.50	2.4	16.6	18.3	28
13196	do	do	do	(2)	186	.69	7.9	5.6	16.0	12

[1] Exact locality not known.

[2] Test not made.

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922*—Continued.

VIRGINIA—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
15767	The Plains	Faquier	Calcareous talc schist	(2)	180	.81	3.9	10.3	16.7	21
15768	do	do	Chlorite talc schist	(2)	177	1.52	10.7	3.7	(2)	(2)
15769	do	do	Chlorite schist	(2)	181	.72	11.7	3.4	(2)	(2)
15770	do	do	Chlorite epidote schist	(2)	184	.52	3.2	12.5	17.3	24
16308	do	do	Hornblende epidote schist	(2)	185	.40	9.9	4.1	(2)	(2)
16309	do	do	Chlorite epidote schist	(2)	184	.72	5.2	7.7	(2)	(2)
16310	do	do	Hornblende epidote schist	(2)	190	.42	6.2	6.5	(2)	22
16312	do	do	Chlorite epidote schist	(2)	187	.44	6.4	6.3	(2)	(2)
16626	do	do	do	(2)	183	.39	4.4	9.1	(2)	31
17086	do	do	do	(2)	187	.24	5.3	7 5	15.7	8
18042	do	do	Talc epidote schist	(2)	193	.67	7.9	5.1	(2)	(2)
18043	do	do	do	(2)	193	.78	4.6	8.7	(2)	(2)
18144	do	do	Epidote amphibolite	(2)	193	.32	2.2	18.2	17.7	26
18893	do	do	Amphibolite	(2)	189	.33	2.8	14.3	(2)	(2)
18894	do	do	do	(2)	188	.20	3.3	12.1	17.3	12
9919	Warrenton	do	do	(2)	187	.76	4.6	8.7	(2)	(2)
9920	do	do	do	(2)	181	2.44	5.9	6.7	(2)	(2)
10304	do	do	Epidote chlorite schist	(2)	185	.63	3.5	11.4	14.7	11
13197	(1)	do	Epidosite	(2)	202	.54	1.8	22.2	18.3	19
14460	(1)	do	do	(2)	194	1.32	6.0	6.7	18.3	(2)
15896	(1)	do	Chlorite epidote schist	(2)	187	.48	4.8	8.3	17.0	10
20096	Floyd	Floyd	Hornblende mica gneiss	(2)	168	2.81	10.6	3.8	11.7	7
13765	Shores	Fluvanna	Schist	(2)	181	.44	2.4	16.7	18.3	10
15485	Strathmore	do	Chlorite schist	(2)	185	.33	3.3	12.1	15.0	10
19069	(1)	do	Quartz	(2)	164	.19	10.2	3.9	(2)	(2)
13194	Winchester (near)	Frederick	Limestone	(2)	169	.02	7.5	5.3	15.3	7
14583	do	do	do	(2)	171	.10	8.4	4.8	15.3	3
14879	do	do	Dolomite	(2)	173	.28	3.5	11.4	16.7	14
14880	do	do	Calcareous slate	(2)	158	3.16	8.9	4.5	.0	5
14969	do	do	Dolomite	(2)	176	.21	3.0	13.3	17.3	15
11246	Bluff City	Giles	Quartzite	(2)	165	.89	3.1	12.9	(2)	(3)
11248	do	do	Siliceous dolomite	(2)	175	.33	3.6	11.1	(2)	(2)
14463	Pembroke	do	do	(2)	177	.30	3.2	12.5	16.3	9
14493	Ripplemeade	do	do	(2)	175	.52	2.7	14.8	17.3	13
11412	Forest Hills	Henrico	Biotite granite	19,270	(2)	(2)	(2)	(2)	18.0	6
16988	Richmond (near)	do	do	(2)	164	.47	3.4	11.8	18.0	10
16519	(1)	do	Limestone	(2)	167	.94	6.9	5.8	(2)	5
14584	Dryden	Lee	Siliceous limestone	(2)	168	.30	5.7	7.0	14.7	7

20123	do	do	Limestone	(2)	169	.20	5.8	6.9	15.3	3
20124	do	do	do	(2)	170	.28	5.4	7.4	15.3	6
12878	Stickleyville	do	Argillaceous limestone	(2)	167	.17	9.1	4.4	14.3	8
12879	do	do	Limestone	(2)	165	.17	5.4	11.4	13.3	6
12880	do	do	Ferrugineous sandstone	(2)	167	.31	5.3	7.5	8.0	8
13176	do	do	Limestone	(2)	169	.01	6.2	6.4	16.0	8
13917	do	do	do	(2)	168	.34	6.1	6.5	16.3	4
13918	do	do	Argillaceous limestone	(2)	169	.30	6.0	6.6	15.7	5
13641	(1)	do	Limestone	(2)	168	.21	5.4	7.4	15.3	11
19723	Albie	Loudoun	Altered basalt	(2)	181	.26	3.7	10.8	17.7	9
20541	do	do	Altered diabase	(2)	177	.73	3.3	12.1	18.0	20
20542	do	do	Altered basalt	(2)	180	.35	3.1	12.9	18.3	12
19722	Arcola	do	Basalt	(2)	187	.24	1.9	20.9	18.7	34
16047	Belmont Park	do	Gabbroitic diabase	(2)	(2)	(2)	2.2	18.2	(2)	(2)
16048	do	do	(5)	(2)	(2)	(2)	2.3	17.4	(2)	(2)
10009	Hamilton (¾ mile east)	do	Amphibolite	(2)	178	.49	3.9	10.3	17.3	10
15489	Leesburg	do	Chlorite epidote schist	(2)	188	1.20	12.3	3.3	(2)	8
15490	do	do	Crystalline limestone	(2)	172	.92	6.3	6.4	13.7	6
20514	do	do	Marble	(2)	(2)	(2)	4.8	8.3	17.3	10
15487	Lucketts	do	Limestone conglomerate	(2)	175	.39	3.8	10.5	17.0	10
15488	do	do	Calcareous sandstone	(2)	151	2.82	3.4	11.8	15.7	17
16031	do	do	Conglomerate	(2)	187	.63	5.8	6.9	(2)	(2)
16257	do	do	Limestone conglomerate	(2)	175	.28	4.1	9.8	(2)	(2)
16414	do	do	do	(2)	174	.33	4.3	9.3	(2)	9
17087	do	do	do	(2)	175	.35	5.9	6.8	(2)	(2)
18762	do	do	Sericite schist	(2)	168	.50	6.7	6.0	18.7	7
18789	do	do	Quartzite	(2)	165	.25	6.2	6.5	19.0	8
14197	Point of Rocks (near)	do	Sericite gneiss	(2)	168	.36	5.7	7.0	19.3	12
14198	do	do	Limestone conglomerate	(2)	175	.33	4.5	8.9	(2)	(2)
19718	(1)	do	Basalt	(2)	180	.39	3.2	12.5	17.7	10
14284	Between Blacksburg and Newport.	Montgomery	Feldspathic sandstone	(2)	161	1.73	(2)	(2)	16.7	8
15152	Arrington (near)	Nelson	Amphibolite	(2)	185	1.42	3.5	11.4	18.3	14
15993	Ryans Mill	do	Quartz	(2)	165	.13	7.8	5.1	19.3	10
15994	do	do	Altered gneiss	(2)	171	1.60	9.3	4.3	18.3	11
15995	do	do	Amphibolite	(2)	192	.61	2.7	14.8	16.3	13
12835	(1)	do	Biotite gneiss	(2)	171	.20	6.5	6.2	18.0	11
20322	Barboursville	Orange	Micaceous sandstone	(2)	164	1.61	12.6	3.2	12.7	5
20323	Barboursville (near)	do	Talc amphibolite	(2)	182	1.21	12.0	3.3	8.0	5
20324	do	do	Micaceous sandstone	(2)	165	1.17	7.6	5.3	15.3	6
15944	Compton	Page	Feldspathic sandstone	(2)	148	5.55	18.0	2.2	8.3	4
10099	Luray	do	Argillaceous limestone	(2)	167	.75	5.4	7.4	14.3	5
14384	New Design (near)	Pittsylvania	Biotite gneiss	(2)	170	.21	4.5	8.9	18.0	6
13071	(1)	do	Quartz	(2)	165	.20	13.8	2.9	(2)	(2)
13529	(1)	do	Biotite gneiss	(2)	172	.49	4.2	9.5	18.7	10
19943	(1)	do	Sandstone	(2)	163	.68	2.8	14.3	18.7	17
19987	(1)	do	do	(2)	166	.43	2.7	14.8	17.7	15
10298	Buckland	Prince William	Diabase	(2)	178	1.75	(2)	(2)	17.3	16
15366	Occoquan (near)	do	Altered granite	(2)	163	1.06	4.7	8.5	19.3	8

[1] Exact locality not known.

[2] Test not made.

[5] Classification not known.

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922*—Continued.

VIRGINIA—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
20317	Occoquan (near)	Prince William	Granite gneiss	(2)	170	1.06	(2)	(2)	18.3	8
15919	Draper	Pulaski	Siliceous limestone	(2)	168	.35	5.3	7.5	15.3	(2)
16025	do	do	Argillaceous limestone	(2)	170	.24	5.4	7.4	15.3	7
16026	do	do	Siliceous clay limestone	(2)	165	.20	4.6	8.7	14.7	11
15786	Draper (near)	do	Limestone	(2)	167	.71	6.8	5.9	15.0	7
14988	Glenbar (near)	Rappahannock	Biotite sericite schist	(2)	176	.64	5.1	7.8	16.0	7
19360	Scrabble	do	Feldspathic sandstone	(2)	164	.60	4.0	10.0	17.7	12
19362	do	do	Altered gneiss	(2)	165	.81	4.9	8.2	18.0	8
14461	Sperryville (near)	do	Altered granite	(2)	163	.70	3.8	10.5	18.3	12
19363	Woodville	do	Biotite gneiss	(2)	171	.34	5.0	8.0	17.0	10
19364	do	do	do	(2)	171	.68	5.3	7.5	17.7	8
19542	(1)	do	Biotite sericite schist	(2)	173	.38	7.2	5.6	10.0	7
19961	Roanoke	Roanoke	Dolomite	(2)	175	.43	3.0	13.3	15.3	11
20580	(1)	do	do	(2)	176	.78	7.0	5.7	15.7	4
11549	Buena Vista (near)	Rockbridge	Limestone	(2)	176	.78	2.7	14.8	18.3	23
11550	do	do	Argillaceous limestone	(2)	173	.20	2.4	16.7	17.0	11
13041	Glasgow	do	Limestone	(2)	170	.19	4.7	8.5	16.3	9
13042	do	do	Argillaceous limestone	(2)	168	.20	6.4	6.3	12.7	17
13043	Glasgow (near)	do	Quartzite	(2)	165	.20	3.0	13.3	(2)	(2)
17929	Natural Bridge	do	Crystalline limestone	(2)	172	.24	5.2	7.7	12.7	5
17935	do	do	Argillaceous limestone	(2)	175	.09	4.4	9.1	18.0	11
14017	Timber Ridge	do	Siliceous dolomite	(2)	182	.32	2.8	14.3	17.9	12
15112	do	do	Siliceous limestone	(2)	177	.19	3.8	10.5	18.3	11
15113	do	do	do	(2)	175	.14	3.0	13.3	17.7	14
16223	(1)	do	do	(2)	169	.26	5.0	8.0	13.3	17
17092	(1)	do	Limestone	(2)	169	2.10	6.0	6.7	12.6	5
16513	Harrisonburg	Rockingham	Argillaceous limestone	(2)	169	.23	5.7	7.0	(2)	5
12789	Balton	Russell	Dolomite	(2)	175	.08	3.3	12.1	16.7	21
11719	Castlewood	do	Limestone	(2)	171	.15	3.9	10.3	17.3	13
12788	Hansonville	do	Argillaceous dolomite	(2)	169	.74	3.6	11.1	16.7	14
12840	(1)	do	Limestone	(2)	171	.08	5.8	6.9	15.3	8
10930	Gates City	Scott	Argillaceous limestone	(2)	168	.38	4.1	9.7	16.0	13
20889	Strasburg Junction	Shenandoah	Limestone	(2)	172	.32	4.6	8.7	15.7	4
16011	Atkins	Smyth	Dolomite	(2)	173	.81	6.7	6.0	18.0	7
16110	do	do	Argillaceous limestone	(2)	173	.38	2.8	14.3	16.3	7
16262	do	do	Siliceous dolomite	(2)	174	.67	4.7	8.6	(2)	10
16507	do	do	do	(2)	167	9.02	5.6	7.1	(2)	9
16509	do	do	Dolomite	(2)	174	.74	5.8	6.9	(2)	7
16589	do	do	Limestone	(2)	169	.58	5.4	7.4	13.7	5

19083	do	do	Ferruginous sandstone	(2)	162	1.53	5.2	7.7	17.7		12
19084	do	do	Argillaceous dolomite	(2)	177	.55	6.1	6.6	15.7		5
16508	Groseclose	do	do	(2)	173	1.41	9.0	4.4	(2)		5
16289	Marion	do	Quartzite	(2)	162	1.28	4.5	8.9	(2)	(2)	
16287	(1)	do	Dolomite	(2)	172	.79	7.0	5.7	(2)		5
11272	Front Royal	Warren	do	(2)	171	.57	4.3	9.3	14.3		3
17853	Abingdon	Washington	Argillaceous limestone	(2)	171	.18	5.0	8.0	17.3		8
16021	Holston	do	do	(2)	168	.15	4.0	10.0	17.0		10
16075	do	do	Siliceous limestone	(2)	168	.58	5.7	7.0	17.3		8
16178	do	do	Argillacouse limestone	(2)	169	.55	6.4	6.3	10.0		6
20013	(1)	do	Limestone	(2)	167	.61	5.4	7.4	9.7		8
19085	Coeburn (near)	Wise	Feldspathic sandstone	(2)	163	1.59	4.2	9.5	14.3		11
18923	Esserville	do	Sandstone	(2)	155	2.01	5.3	7.5	16.0		6
18924	do	do	do	(2)	154	2.40	5.5	7.3	18.0		6
20125	Pattonsville	do	Limestone	(2)	172	.23	3.8	10.5	14.0		6
16421	St. Paul	do	Argillaceous limestone	(2)	170	.17	4.9	8.1	(2)		5
19086	St. Paul (near)	do	Feldspathic sandstone	(2)	160	2.16	4.6	8.7	14.7		8
10780	Wise	do	Sandstone	(2)	158	2.10	4.5	8.8	18.7		10
16111	Rural Retreat (near)	Wythe	do	(2)	169	.23	4.7	8.5	16.7		7

WASHINGTON.

20886	Lopez Island	San Juan	Volcanic sandstone	(2)	(2)	(2)	3.0	13.3	19.3	(2)	
20882	Sinclair Islet	Skagit	Altered basalt	(2)	(2)	(2)	4.6	8.7	13.7	(2)	
20884	do	do	do	(2)	(2)	(2)	3.7	10.8	16.0	(2)	
10239	Cook (3 miles north)	Skamania	Basalt	(2)	177	0.92	2.6	15.4	18.3		24

WEST VIRGINIA.

13886	Belington	Barbour	Sandstone	(2)	147	2.60	7.7	5.2	17.3		7
10068	Bedington (east of)	Berkeley	Argillacous limestone	(2)	172	.19	4.9	8.2	16.0		10
10075	do	do	do	(2)	168	.32	5.6	7.1	(2)	(2)	
10066	Berkeley Station	do	Limestone	(2)	168	.27	6.3	6.4	16.0		4
10065	Blairton (near)	do	Argillaceous limestone	(2)	168	.19	5.1	7.8	16.7		6
10084	do	do	Limestone	(2)	168	.23	5.9	6.8	16.3		5
10070	Bunker Hill	do	do	(2)	168	.24	5.1	7.8	16.0		4
10059	Butts Store	do	Feldspathic sandstone	(2)	140	3.45	7.2	5.6	18.7		10
10085	Cumbo	do	Limestone	(2)	172	.52	4.6	8.7	16.7		4
10077	Dartsville	do	do	(2)	168	.31	5.0	8.0	15.0		4
10079	Falling Water	do	do	(2)	168	1.27	4.7	8.5	16.7		8
10082	Falling Water (near)	do	do	(2)	168	.59	5.6	7.1	(2)	(2)	
10083	Falling Water	do	Chert and limestone, mixed	(2)	(2)	(2)	4.7	8.5	(2)	(2)	
10063	Ferrell Ridge	do	Limestone	(2)	168	1.61	6.2	6.5	14.0		4
10074	Gerrardstown	do	Argillaceous limestone	(2)	172	.46	6.5	6.2	15.7		12

[1] Exact locality not known.

[2] Tests not made.

TABLE 1.—*Result of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922*—Continued.

WEST VIRGINIA—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
10073	Hedgesville (west of)	Berkeley	Feldspathic sandstone	(2)	165	.62	2.8	14.3	16.7	19
10062	Inwood (near)	do	Sandstone	(2)	144	3.19	16.6	2.4	19.3	2
10067	Jones Springs	do	Siliceous limestone	(2)	168	.31	4.4	9.1	17.3	9
10081	do	do	Crystalline limestone	(2)	168	.37	5.7	7.0	14.0	4
10080	Little Georgetown	do	Argillacous limestone	(2)	175	.37	6.5	6.2	18.7	10
10064	Martinsburg (south of)	do	Dolomite	(2)	178	.31	3.6	11.1	16.3	10
10086	do	do	Limestone	(2)	168	.56	5.8	6.9	18.0	5
10102	Martinsburg	do	do	(2)	(2)	(2)	5.2	7.7	16.7	6
11708	do	do	do	(2)	170	.19	5.9	6.8	14.0	3
14263	do	do	do	(2)	169	.15	(2)	(2)	14.7	6
14265	do	do	do	(2)	170	.08	9.0	14.4	14.7	3
14266	do	do	do	(2)	169	.09	7.3	5.5	14.0	3
19691	do	do	Dolomite	(2)	173	.58	4.8	8.2	17.3	8
10071	Nipetown	do	Limestone	(2)	168	.43	4.9	8.2	16.0	3
10072	Springmills	do	do	(2)	168	.27	4.2	9.5	15.0	4
10078	Tomahawk	do	Siliceous limestone	(2)	168	.27	4.5	8.9	18.3	15
10087	Tomahawk (north of)	do	Sandstone	(2)	156	1.66	7.9	5.1	(2)	(2)
10076	Van Clevesville (south of)	do	Argillaceous limestone	(2)	168	.36	5.0	8.0	17.0	9
14358	Kingston	Fayette	Feldspathic sandstone	(2)	156	3.06	9.3	4.3	14.3	9
10511	Scherr	Grant	Argillaceous limestone	(2)	166	.60	5.4	7.4	(2)	(2)
9972	Port Springs	Greenbrier	Limestone	(2)	168	.24	4.1	9.8	15.7	9
9925	Renick	do	Argillaceous limestone	(2)	168	.66	3.8	10.5	16.3	8
11925	Roncevert	do	Limestone	(2)	168	.18	4.3	9.3	16.7	11
11715	White Sulphur Springs	do	Feldspathic sandstone	(2)	164	.84	3.2	12.5	18.3	14
11763	(1)	do	do	(2)	165	.82	3.0	13.3	18.7	14
17866	Wardensville	Hardy	Limestone	(2)	170	.15	4.9	8.2	13.3	4
15486	Clarksburg	Harrison	Feldspathic sandstone	(2)	154	4.34	4.7	8.5	10.0	8
10103	Kearneysville	Jefferson	Limestone	(2)	(2)	(2)	2.7	14.8	14.0	6
15988	do	do	do	(2)	(2)	(2)	4.8	8.3	(2)	(2)
16209	do	do	Argillaceous limestone	(2)	169	.12	4.6	8.7	14.7	6
11609	(1)	do	Dolomite	(2)	177	.40	4.5	8.9	16.7	6
12728	Charleston (near)	Kanawha	Feldspathic sandstone	(2)	155	4.67	4.6	8.7	3.0	6
13706	(1)	do	do	(2)	157	3.88	12.2	3.3	12.0	7
13908	Hamlin	Lincoln	Sandstone	(2)	153	4.98	8.7	4.6	12.0	5
13992	Hamlin (near)	do	do	(2)	156	3.90	8.6	4.7	3.3	3
14625	Logan	Logan	Calcareous sandstone	(2)	169	.86	7.5	5.3	13.3	7
13396	Ridesville	Marion	Limestone	(2)	163	.50	4.3	9.3	16.0	9
16384	Princeton	Mercer	Sandstone	(2)	156	2.80	3.9	10.3	(2)	8
9966	Greer	Monongalia	Argillaceous limestone	(2)	168	.73	4.7	8.5	15.7	8

9967	.....do.....	.....do.....	.....do.....	(2)	168	.59	4.7	8.5	15.7	9
9968	.....do.....	.....do.....	.....do.....	(2)	168	.73	4.8	8.3	14.0	9
9969	.....do.....	.....do.....	Siliceous limestone.....	(2)	168	.56	3.0	13.3	16.7	10
15812	Union.....	Monroe.....	.....do.....	(2)	170	.20	5.3	7.5	16.3	8
15813	.....do.....	.....do.....	.....do.....	(2)	171	.27	4.6	8.7	16.0	9
15814	.....do.....	.....do.....	.....do.....	(2)	170	.19	2.9	13.8	17.3	13
14733	Berkeley Springs.....	Morgan.....	Quartzite.....	(2)	164	.41	2.6	15.4	19.3	22
14710	Wheeling.....	Ohio.....	Blast furnace slag.....	(2)	130	6.96	7.0	5.7	(2)	(2)
10348	Albright (near).....	Preston.....	Sandstone.....	(2)	154	1.88	8.1	4.9	17.3	5
10349	.....do.....	.....do.....	Ferruginous sandstone.....	(2)	160	2.40	4.0	10.0	15.3	9
20894	Irondale.....	.....do.....	Argillaceous limestone.....	(2)	162	2.38	5.7	7.0	(2)	(2)
20895	.....do.....	.....do.....	.....do.....	(2)	166	1.35	4.4	9.1	16.7	(2)
14320	Hurricane.....	Putnam.....	Feldspathic sandstone.....	(2)	153	4.47	11.7	3.4	2.7	4
12787	Nitro.....	.....do.....	.....do.....	(2)	152	2.16	11.6	3.4	(2)	6
11472	Beckley.....	Raleigh.....	Sandstone.....	(2)	156	3.07	3.1	12.9	15.0	6
14133	Beckley (near).....	.....do.....	Feldspathic sandstone.....	(2)	159	2.62	3.8	10.5	15.3	7
14134	.....do.....	.....do.....	Sandstone.....	(2)	153	3.03	4.5	8.9	17.2	6
16326	Beckley.....	.....do.....	Feldspathic sandstone.....	(2)	151	3.47	5.1	7.8	(2)	7
11736	Colt.....	.....do.....	Quartz conglomerate.....	(2)	151	3.23	31.6	1.3	(2)	(2)
11545	Cherry Glade.....	.....do.....	Sandstone.....	(2)	152	3.14	8.2	4.9	16.7	4
16203	Cranberry.....	.....do.....	Feldspathic sandstone.....	(2)	159	2.19	8.0	5.0	11.3	5
11546	Daniels.....	.....do.....	Sandstone.....	(2)	155	2.24	4.8	8.3	16.7	7
11544	Ghent.....	.....do.....	.....do.....	(2)	158	2.32	4.2	9.5	17.3	8
11471	Lester (near).....	.....do.....	.....do.....	(2)	150	3.60	9.5	4.2	13.3	5
16464	Price Hill.....	.....do.....	.....do.....	(2)	152	2.74	6.4	6.3	(2)	7
16487	Prosperity.....	.....do.....	.....do.....	(2)	156	1.96	4.4	9.1	16.3	10
11547	Shady Springs.....	.....do.....	.....do.....	(2)	156	2.44	4.9	8.2	18.0	6
11473	Surveyor.....	.....do.....	.....do.....	(2)	155	2.74	4.2	9.3	18.0	6
16146	.....do.....	.....do.....	.....do.....	(2)	156	2.64	3.4	11.8	17.7	10
14176	Sylvia.....	.....do.....	.....do.....	(2)	160	1.69	6.1	6.6	14.8	6
11130	Trap Hill District.....	.....do.....	.....do.....	(2)	154	3.69	3.9	10.3	16.6	9
10036	Spencer (near).....	Roane.....	Feldspathic sandstone.....	(2)	156	3.52	12.3	3.3	8.7	4
13571	.....do.....	.....do.....	Micaceous sandstone.....	(2)	156	4.22	8.9	4.5	2.0	8
13806	.....do.....	.....do.....	Calcareous sandstone.....	(2)	156	1.78	4.4	9.1	10.7	6
14245	.....do.....	.....do.....	.....do.....	(2)	165	1.32	4.7	8.5	15.0	9
19978	Blueville.....	Taylor.....	Sandstone.....	(2)	152	2.62	3.9	10.3	17.7	20
13296	Fetterman.....	.....do.....	Feldspathic sandstone.....	(2)	154	3.91	9.2	4.3	11.7	5
10509	Davis.....	Tucker.....	Siliceous limestone.....	(2)	167	.05	3.7	10.8	14.3	10
10510	.....do.....	.....do.....	Argillaceous limestone.....	(2)	168	.12	5.0	8.0	16.3	6
13887	Middlebourne (near).....	Tyler.....	Feldspathic sandstone.....	(2)	154	4.15	7.8	5.1	9.3	5
14281	Littleton (east of).....	Wetzel.....	.....do.....	(2)	144	6.22	19.1	2.1	9.0	3
14282	.....do.....	.....do.....	.....do.....	(2)	151	4.64	10.6	3.8	6.7	4

[1] Exact locality not known.

[2] Test not made.

TABLE 1.—*Result of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1919, to January 1, 1922*—Continued.

WISCONSIN.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
14132	Brillion	Calumet	Dolomite	(2)	173	0.98	4.6	8.7	12.5	4
11971	Springdale	Dane	do	(2)	172	1.27	3.7	10.8	16.0	12
18746	Knowles	Dodge	do	(2)	168	1.30	5.2	7.7	13.7	7
18744	Nasbro	do	do	(2)	172	1.01	3.8	10.5	14.7	8
9999	Berlin	Green Lake	Rhyolite	(2)	165	.16	1.9	21.3	19.0	25
18743	Kewaunee	Kewaunee	Dolomite	(2)	175	.63	4.3	9.3	16.0	8
13168	Buffalo	Marquette	Altered syenite	(2)	167	.13	2.2	18.2	19.3	30
18713	Liberty Bluff (near)	do	Sandstone	19,495	157	1.48	17.0	2.4	18.7	7
14676	Montello	do	Granite	(2)	164	.25	2.4	16.7	18.7	16
13537	Milwaukee	Milwaukee	Siliceous limestone	(2)	166	2.15	6.0	6.7	15.3	9
10014	Wauwatosa	do	Argillaceous dolomite	(2)	168	2.11	3.7	10.8	14.7	8
11129	Wauwatosa (near)	do	do	16,700	168	2.01	3.8	10.5	15.3	11
11367	Wauwatosa	do	Argillaceous limestone	20,370	163	3.20	2.1	19.0	14.0	8
12615	(1)	do	Dolomite	(2)	166	2.84	4.0	10.0	13.3	7
12616	(1)	do	Argillaceous dolomite	(2)	161	2.42	6.4	6.3	12.0	7
12617	(1)	do	do	(2)	164	3.21	4.5	8.9	14.3	10
12618	(1)	do	Dolomite	(2)	175	.14	6.5	6.1	16.0	6
12619	(1)	do	Argillaceous dolomite	(2)	167	2.66	3.7	10.8	14.3	10
10986	Wells	Monroe	Calcareous sandstone	(2)	162	2.79	4.8	8.3	18.0	5
9970	Blackcreek	Outagamie	Dolomite	(2)	178	.58	4.6	8.7	14.7	9
9971	do	do	do	(2)	178	.53	4.1	9.8	15.3	8
10022	Belgium	Ozaukee	Argillaceous dolomite	(2)	175	1.15	7.4	5.5	14.3	8
11625	Mequon	do	Dolomite	22,750	174	1.09	3.4	11.8	12.3	7
11638	do	do	do	(2)	178	1.13	5.6	7.1	15.0	7
20916	Stevens Point	Portage	Sandstone	27,715	167	2.39	4.3	9.3	18.7	10
11447	Redgranite	Waushara	Granite	(2)	165	.33	1.4	28.5	19.3	14
10159	Grand Rapids	Wood	Sandstone	(2)	153	1.91	3.3	12.1	18.3	5
10028	(1)	(1)	Dolomite	(2)	168	1.05	7.1	5.6	13.3	6

CANADA.

13920	Burnt River	Ontario Province	Siliceous limestone	(2)	174	0.68	3.1	12.9	15.7	11
16923	Dundas	do	Dolomite	(2)	(2)	(2)	4.1	9.8	15.0	13
16924	do	do	do	(2)	(2)	(2)	4.3	9.3	14.0	13
17922	do	do	do	(2)	177	.67	3.6	11.1	(2)	(2)
17923	do	do	do	(2)	173	1.31	3.2	12.5	(2)	(2)
20390	do	do	Argillaceous dolomite	33,650	171	.99	3.6	11.1	15.0	13
20391	do	do	Dolomite	27,195	162	1.52	4.9	8.2	14.0	6
20392	do	do	do	25,380	174	.74	3.7	10.8	16.0	10
11648	Ottawa (south of)	do	Argillaceous dolomite	(2)	166	3.05	4.8	8.3	13.7	4
11649	Ottawa (east of)	do	Limestone	(2)	167	.56	4.9	8.2	12.0	4
20567	Queenston	do	Argillaceous dolomite	30,225	170	1.82	4.5	8.9	14.3	10
20568	do	do	Dolomite	27,485	166	1.61	5.8	6.9	14.3	10
20569	do	do	do	20,500	165	1.77	4.9	8.2	14.3	9
20577	Walkerton	do	Limestone	16,740	164	.67	7.4	5.4	13.3	4
9746	Windmill Point	do	Cherty limestone	(2)	165	.41	3.9	10.3	18.3	13
11650	Hull (near)	Quebec Province	Diabase	(2)	184	.54	2.4	16.7	18.0	13
10017	Montreal	do	Nephelite syenite	(2)	156	.60	2.2	18.2	18.7	18
10332	Wellesley Island	do	Biotite granite	(2)	165	.28	2.9	13.8	18.0	10

DOMINICAN REPUBLIC.

15864	Santo Domingo (near)	Santo Domingo Province	Crystalline limestone	(2)	143	5.01	24.0	1.7	(2)	(2)
15865	do	do	Fragmental basalt	(2)	177	.97	3.5	11.4	18.7	11
15866	South shore of Samana Bay (near Punta del Boca del Infierno).	do	Tuffaceous limestone	(2)	155	3.01	11.2	3.6	(2)	(2)
15867	Sanchez-Samana Cross-roads.	Samana Province	Crystalline limestone	(2)	170	.27	(2)	(2)	8.5	6
16101	Santo Domingo (near)	Santa Domingo Province	Argillaceous limestone	(2)	178	4.13	6.3	6.4	10.7	5
16103	La Vega Highway, kilometer 30.	do	Altered basalt	(2)	179	1.14	3.5	11.4	16.7	8
16104	La Vega Highway, kilometer 34.	do	Altered andesite	(2)	177	1.26	3.9	10.3	13.7	10

HAITI.

19740	Acul Samedi (near)		Quartz diorite	(2)	171	0.58	2.8	14.3	18.0	15
19737	Cape Haitien		Weathered chert	(2)	146	4.05	9.1	4.4	17.7	(2)
19742	Limbe (near)		Serpentine	(2)	188	1.13	5.8	6.9	18.7	22
19744	Pont Beudet		Limestone	(2)	165	1.11	4.4	9.1	14.7	7

[1] Exact locality not known.

[2] Test not made.

CRUSHING STRENGTH OR COMPRESSION TEST.

This test is made upon a cylindrical test specimen 2 inches in diameter and 2 inches high. Both ends of the specimen, which have been sawed at right angles to the axis of the cylinder, are carefully ground to plane surfaces. The cylinder then is crushed in a 200,000-pound Universal testing machine at a speed of 0.1 inch per minute. A small 2-inch spherical bearing block is placed between the moving head of the machine and the specimen. The average of at least two determinations is reported as the crushing strength, calculated in pounds per square inch. Crushing strength tests are made only when specifically requested.

INTERPRETATION OF RESULTS OF PHYSICAL TESTS.

To interpret the results of the physical tests of road-building rock, the Bureau of Public Roads has adopted a table of general limiting test values for broken stone for the various types of road construction. For general reference, these limiting values, together with comments upon limits shown, are given in Table 3. By comparing the results of tests on a sample of rock with the limits shown in the table a general idea of the types of road construction for which it is best suited may be obtained. It must be emphasized, however, that these values represent average conditions only. For any given material a number of factors such as type of stone, character and volume of traffic, and the character of available material will influence the interpretation to be given the results of the tests. Table 4 contains the total number of rock samples received from the various States which have been tested between January 1, 1916, and December 31, 1921.

TABLE 2.—*Results of compression tests of rock, made prior to Jan. 1, 1916.*

Serial No.	Locality.	County.	Name.	Crushing strength pounds per square inch.
		ARKANSAS.		
6331	Bald Knob	White	Sandstone	19,860
		CONNECTICUT.		
9791	Oneco	Windham	Biotite granite	16,635
		ILLINOIS.		
4422	Embarras	Coles	Limestone	17,300
5509	Thornton	Cook	Dolomite	23,060
6053	do	do	do	16,880
8711	Hillside	do	Argillaceous dolomite	15,730
4660	Tunnel Hill	Johnson	Sandstone	19,150
7509	Reevesville	do	Argillaceous limestone	25,780
7510	do	do	do	28,400
4764	Kankakee	Kankakee	Dolomite	20,610
5550	do	do	do	17,710
6088	do	do	Argillaceous dolomite	20,830
6165	do	do	Dolomite	11,660
6865	do	do	do	13,500
7298	do	do	Argillaceous dolomite	25,850
7299	do	do	do	20,000
7300	do	do	do	19,008

TABLE 2.—*Results of compression tests of rock, made prior to Jan. 1, 1916*—Continued.

ILLINOIS—Continued.

Serial No.	Locality.	County.	Name.	Crushing strength, pounds per square inch.
7301	Kankakee	Kankakee	Argillaceous dolomite	19,700
7302	do	do	Dolomite	17,050
7871	Lehigh	do	Argillaceous dolomite	16,700
4421	Alton	Madison	Limestone	15,100
7422	Brookville	Ogle	Argillaceous dolomite	18,640
7423	do	do	do	18,180
5549	Anna	Union	Limestone	19,510

INDIANA.

5534	Logansport	Cass	Limstone	20,350
4655	Greensburg	Decatur	Dolomite	17,960
4658	St. Paul	do	Limestone	18,400
4690	Westport	do	Dolomitic limestone	20,000
4659	St. Paul	do	do	20,510
5088	do	do	Limestone	19,800
4197	Mitchell	Lawrence	Argillaceous dolomite	12,250
5027	Bedford	do	Limestone	6,900
5029	do	do	do	6,450
3368	Greencastle	Putnam	do	16,000
5737	Osgood	Ripley	do	14,470
4657	Wabash	Wabash	Dolomitic limestone	18,790

IOWA.

5525	Cedar Rapids	Linn	Dolomite limestone	19,950
5526	La Grande	Marshall	do	14,850

KENTUCKY.

5552	Princeton	Caldwell	Dolomitic limestone	23,860
7688	Cedar Bluff	do	Argillaceous limestone	25,720
5921	Limestone	Carter	Limestone	14,900
5922	Carter	do	Siliceous limestone	13,400

MAINE.

7438	Swans Island	Hancock	Biotite granite	18,400
8745	Vinal Haven	Knox	Granite	20,020
8768	St. George	do	do	22,800
8769	Vinal Haven	do	do	20,930
8781	St. George	do	do	18,780
9865	do	do	do	17,150
9996	Long Cove	do	do	17,540
9445	Vinal Haven	do	Biotite granite	21,220
10366	St. George	do	do	27,050
7439	Frankford	Waldo	do	20,600

MARYLAND.

5611	Mount Savage Junction.	Alleghany	Siliceous limestone	34,930
4884	Frederick	Frederick	Limestone	17,580
5694	Havre de Grace	Harford	Gneissoid granite	34,410
5695	do	do	Sericite gneiss	20,090
5696	do	do	Gneissoid granite	21,670
5697	do	do	Amphibolite	34,380
5698	do	do	Gneissoid granite	35,210
5699	do	do	do	22,190

TABLE 2.—*Results of compression tests of rock, made prior to Jan. 1, 1916*—Continued.

MASSACHUSETTS.

Serial No.	Locality.	County.	Name.	Crushing strength, pounds per squareinch.
6891	Rockport	Essex	Biotite granite	22,370
6892	do	do	do	23,610
6893	do	do	do	22,670
6894	do	do	do	21,600
8796	do	do	do	23,830
5671	Westfield	Hampden	Altered diabase	32,850
8862	Westford	Middlesex	Granite	13,980
8874	do	do	do	17,000
8875	do	do	do	16,250
5988	West Auburn	Worcester	Mica gneiss	21,950

MICHIGAN.

9593	Calcite	Presque Isle	Limestone	10,300

MINNESOTA.

5524	Stockton	Winona	Argillaceous dolomite	16,000

MISSOURI.

6375	Rochefort	Boone	Limestone	13,900
6377	Sweeney	Cooper	Argillaceous limestone	14,900

NEW YORK.

6457	(1)	Clinton	Plagioclase gneiss	18,500
6458	(1)	do	Pyroxene gneiss	20,500
8011	(1)	Dutchess	Dolomite	34,450
5544	Camelo	do	do	29,050
5872	Akron Junction	Erie	Cherty limestone	16,700
6056	do	do	do	31,180
8577	Gloversville	Fulton	Biotite gneiss	14,585
4157	Alexandria Bay	Jefferson	Granite	21,600
8833	do	do	do	26,180
8902	do	do	do	14,150
9129	do	do	do	14,390
9130	do	do	Gneissoid granite	17,600
7437	do	do	Granite	27,200
8012	(1)	Rockland	Gabbroitic diabase	31,300
8013	(1)	do	Siliceous dolomite	22,200

NEW HAMPSHIRE.

8872	Melford	Hillsboro	Granite	15,050
9010	do	do	Biotite granite	16,640
9011	do	do	do	14,870
9012	do	do	do	18,230
9031	Concord	Merrimack	Granite	16,600
9036	do	do	do	13,420
9037	do	do	do	13,900
8870	do	do	do	15,100

NORTH CAROLINA.

8396	(1)	Forsythe	Granite	13,140
8397	(1)	do	Hypersthene gabbro	11,880
8682	Spencer Mountain	Gaston	Feldspathic quartzite	31,520
8881	Gastonia	do	Quartzite	17,100
8576	Mooresville	Iredell	Biotite granite	26,000
5373	(1)	McDowell	Sanstsone	22,600

[1] Exact locality not known.

TABLE 2.—*Results of compression tests of rock, made prior to Jan. 1, 1916*—Continued.

NORTH CAROLINA—Continued.

Serial No.	Locality.	County.	Name.	Crushing strength, pounds per square inch.
9038	Wilson	Wilson	Granite	16,070
5956	Stacey	Rockingham	Granite gneiss	23,220
5496	Sansbury	Rowan	Granite	33,750
6071	Bostic	Rutherford	Biotite gneiss	16,100
5497	Mount Airy	Surry	Granite	18,400
7433	do	do	do	15,200
8901	do	do	do	5,100
9048	do	do	do	16,440
8419	Granita (near)	Wake	Biotite granite	14,160
3807	Wise	Warren	Granite	18,240
3808	do	do	do	18,560
5374	[1]	Yancey	Quartzite	12,900

OHIO.

4694	Osborne	Clark	Dolomitic limestone	8,690
4695	Springfield	do	Dolomite	18,960
9282	Cleveland	Cuyahoga	Granite	31,790
9283	do	do	do	27,900
9284	do	do	do	24,790
9285	do	do	do	26,990
9459	do	do	do	24,900
4378	Sandusky	Erie	Limestone	19,400
5554	do	do	do	21,850
5753	Castalia	do	Dolomitic limestone	18,530
6055	do	do	Limestone	20,810
5505	Marble Cliff	Franklin	do	16,750
5506	do	do	do	12,350
5630	Columbus	do	Ferrugineous sandstone	21,800
4693	Patterson	Hardin	Dolomite	11,360
5553	Dunkirk	do	do	26,200
4707	Hillsboro	Highland	Cherty limestone	15,590
8347	Clarksfield	Huron	Calcareous sandstone	9,490
4656	Big Springs	Logan	Argillaceous limestone	16,380
6054	Vulcan	Lucas	Siliceous limestone	25,480
6057	Holland	do	Argillaceous limestone	19,430
8402	Toledo, 10 miles west of	do	Dolomite	11,600
6052	White Rock	Ottawa	do	16,620
5556	Bloomville	Seneca	Limestone	20,250
5555	Middleport	Van Wert	Dolomite	25,200

OKLAHOMA.

3388	Granite	Greer	Granite	18,000

PENNSYLVANIA.

5602	Hyndman	Bedford	Impure limestone	24,150
5603	do	do	Siliceous limestone	21,860
5632	Birdsboro	Berks	Altered diabase	39,215
8724	Juniata	Blair	Argillaceous limestone	15,480
8725	[1]	do	do	20,880
8625	Hazard	Carbon	Blast-furnace slag	9,000
7973	[1]	Chester	Pyroxene quartzite	31,800
7978	[1]	do	Mica schist	23,500
7979	[1]	do	do	23,900
5578	Salona	Clinton	Argillaceous limestone	18,710
7844	[1]	Dauphin	Siliceous limestone	26,500
8306	[1]	do	Limestone	8,510
8427	[1]	do	do	19,250
8465	[1]	do	Siliceous dolomite	9,640
8049	[1]	Elk	Ferruginous sandstone	14,150
5771	Indian Creek Station	Fayette	Calcareous sandstone	37,740
6097	Bidwell	do	Limestone	13,450

[1] Exact locality not known.

TABLE 2.—*Results of compression tests of rock, made prior to Jan. 1, 1916*—Continued.

PENNSYLVANIA—Continued.

Serial No.	Locality.	County.	Name	Crushing strength, pounds per square inch.
9347	Connellsville	Bedford	Impure limestone	26,050
5604	Water Street	Huntingdon	Feldspathic sandstone	22,330
5557	Walford	Lawrence	Limestone	27,500
6153	Porter Township	Lycoming	Argillaceous limestone	28,580
6154	do	do	do	26,860
6155	do	do	do	18,610
6156	do	do	do	22,930
6157	do	do	Limestone	21,900
6158	do	do	do	14,160
7980	Port Allegheny	McKean	Feldspathic sandstone	9,680
8022	[1]	[1]	Ferruginous sandstone	12,130
8023	[1]	[1]	do	14,000
8024	[1]	[1]	do	12,480
3243	Mcspadden	Somerset	Sandstone	26,900
5830	Prompton	Wayne	Feldspathic sandstone	26,340
5605	Blairsville intersection	Westmoreland	Siliceous limestone	32,560
7428	York	York	Dolomitic marble	27,400

RHODE ISLAND.

8867	Westerly	Washington	Granite	11,740
8868	do	do	do	20,300
8869	do	do	do	20,750

SOUTH CAROLINA.

8389	Williamstown	Anderson	Granite	12,990
5568	Rion	Fairfield	do	29,180
5586a	do	do	do	25,790
5586b	do	do	do	19,240
5586c	do	do	do	33,880

TENNESSEE.

5597	Quarry	Carter	Limestone	22,750
5502	Straw Plains	Jefferson	do	21,730
5504	do	do	do	28,340
5503	do	do	Dolomite	38,070
6533	Knoxville	Knox	Marble	17,970

VERMONT.

5543	East Wallingford	Rutland	Altered diabase	16,800
8853	Barre	Washington	Granite	19,560

VIRGINIA.

8804	Albert	Bedford	Granite gneiss	13,820
6796	[1]	Dinwiddie	Granite	13,150
4900A	Broad Run	Fauquier	Quartz	28,400
4900B	do	do	Epidosite	28,000
5923	Strathmore	Fluvanna	Chlorite epidote schist	13,210
5678	Eggleston (near)	Giles	Dolomite	45,690
5924	Boscobel	Goochland	Granite gneiss	13,550
6615	Korah Station	Henrico	Biotite granite	20,300
5925	Greenway	Nelson	Feldspathic quartzite	16,500
5492	Nokesville	Prince William	Ferruginous sandstone	17,780
5920	Greenlee	Rockbridge	Dolomitic marble	36,900
5382	Bluff Water Station	Rockingham	Limestone	21,450
5385	do	do	do	40,850
5375	St. Paul	Russell	do	17,600
7217	Burkes Garden	Tazewell	Dolomitic sandstone	21,500

[1] Exact locality not known.

TABLE 2.—*Results of compression tests of rock, made prior to Jan. 1, 1916*—Continued.

WEST VIRGINIA.

Serial No.	Locality.	County.	Name.	Crushing strength, pounds per square inch.
5365	Berkeley	Berkeley	Limestone	23,350
5917	Renick	Greenbrier	Crystalline limestone	21,300
5918	Frazier	do	Limestone	17,450
5919	Snow Place	do	do	13,550
7475	Green Spring (east of).	Hampshire	Siliceous limestone	34,400
7476	do	do	Quartzite	15,050
6109	Spring Hill	Kanawha	Sandstone	12,400
9132	Fairmont	Marion	do	5,420
9133	do	do	do	5,720
9134	do	do	do	6,080
5610	Sturgisson	Monongalia	Siliceous limestone	22,440
5612	do	do	Limestone	17,910
5613	do	do	Argillaceous limestone	14,300
5614	do	do	Calcareous sandstone	29,840
5615	do	do	Impure limestone	19,650
5616	do	do	Argillaceous limestone	24,850
8447	Parkersburg	Wood	Feldspathic sandstone	11,910

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5523	Pebbles	Fond du Lac	Dolomite	32,600
3448	Amberg	Marinette	Biotite granite	20,000
8656	Lannon	Waukesha	Dolomite	23,020

TABLE 3.—*General limiting test values.*

Type of construction.	French coefficient of wear.	Toughness.
Water-bound macadam	7 or over	.....
Bituminous macadam	7 or over	.....
Bituminous concrete	8 or over	8 or over.
Cement concrete	7 or over	.....
Water-bound base course	5 or over	.....

Granites, gneisses, schists, sandstones, and quartzites should not, in general, be used in the wearing course of water-bound macadam roads. Shales and slates should never be used in this connection.

For further details and explanation of results in this table and also for tests on all materials to January 1, 1916, see U. S. Department of Agriculture Bulletin 370.

TABLE 4.—*Geographical distribution of samples tested from January 1, 1916, to January 1, 1922.*

State.	Number of samples.	State.	Number of samples.
Alabama	31	Illinois	21
Arizona	10	Indiana	45
Arkansas	55	Iowa	6
California	3	Kansas	27
Colorado	16	Kentucky	23
Connecticut	21	Louisiana	3
Delaware	9	Maine	46
District of Columbia	2	Maryland	44
Florida	12	Massachusetts	127
Georgia	131	Michigan	21
Idaho	2	Minnesota	8

TABLE 4.—*Geographical distribution of samples tested from January 1, 1916, to January 1, 1922*—Continued.

State.	Number of samples.	State.	Number of samples.
Mississippi	6	South Dakota	17
Missouri	16	Tennessee	36
Montana	9	Texas	26
Nebraska	8	Utah	16
New Hampshire	19	Vermont	23
New Jersey	21	Virginia	254
New Mexico	7	Washington	4
New York	43	West Virginia	96
North Carolina	93	Wisconsin	28
Ohio	123	Canada	18
Oklahoma	33	Dominican Republic	7
Oregon	2	Haiti	4
Pennsylvania	75		
Rhode Island	6	Total	1,672
South Carolina	19		

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